

S  
621.31  
N7+  
1976  
Vol. 23

Board of Natural Resources  
Colstrip Hearings

PLEASE RETURN

STATE DOCUMENTS COLLECTION

APR 2 1976

MONTANA STATE LIBRARY  
930 E. Lyndall Ave.  
Helena, Montana 59601

Volume 23

Transcript of Proceedings

February 9, 1976



I N D E X

Colstrip 3 & 4

WITNESSES

Page

February 9, 1976, Monday ..... 3928

JAMES B. SPRING

Written Direct Statement ..... 3930

Cross, by Department of Natural Resources  
and Conservation ..... 3947

Redirect, by Applicants ..... 3959

Re-cross, by Department of Natural Resources  
and Conservation ..... 3963

Re-redirect, by Applicants ..... 3964

JOHN T. EVANS

Written Direct Statement ..... 3967

Cross, by Department of Natural Resources  
and Conservation ..... 3977

Cross, by Northern Cheyenne Tribe, Inc. .... 4000

Redirect, by Applicants ..... 4005



MONDAY, FEBRUARY 9, 1976

The hearing reconvened at 1:10 P.M. on Monday, February 9, 1976, in the Chambers of the Montana House of Representatives, State Capitol, Helena, Montana.

The Honorable Carl M. Davis, Hearings Examiner, presided over the proceedings.

APPEARANCES:

Applicants:

William M. Bellingham, Esq.  
John Ross, Esq.

## Department of Natural Resources and Conservation:

Arden E. Shenker, Esq.  
Donald MacIntyre, Esq.

Northern Cheyenne Tribe, Inc.:

Peter Michael Meloy, Esq.

The following proceedings were had:

HEARINGS EXAMINER: Are the parties ready to proceed?

MR. BELLINGHAM: The applicants are ready, sir.

MR. SHENKER: The Department of Natural Resources is ready.

JAMES B. SPRING, called as a witness by the Applicants, having been first duly sworn upon his oath, both as to his written direct testimony and as to the oral testimony to follow, was examined and testified as follows:



1 MR. BELLINGHAM: A copy of the written testimony  
2 of James B. Spring has been turned over to the court  
3 reporter, and at this time we offer into evidence  
4 Applicants' Exhibits 38 through 46-A, 46-B, 46-C, and  
5 46-D, inclusive.

6 HEARINGS EXAMINER: Very well. We'll reserve any  
7 ruling until after the cross-examination.

8  
9 (THE WRITTEN DIRECT TESTIMONY OF MR. JAMES B. SPRING WAS  
10 DIRECTED TO BE INSERTED AT THIS POINT.)  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

1 STATEMENT OF TESTIMONY OF JAMES B. SPRING

2  
3 My name is James B. Spring and my home address is 3108  
4 Ramada Drive, Billings, Montana. I am 43 years of age and am  
5 president of Christian, Spring, Sielbach & Associates, consulting  
6 engineers, surveyors and photogrammetric engineers, of Billings,  
7 Montana. Our office address is 2020 Grand Avenue, Billings,  
8 Montana.

9 I attended high school at Sheridan, Montana, and studied  
10 part-time at the University of Alaska. I was employed as a  
11 surveyor by Philleo Engineering Service in Fairbanks, Alaska,  
12 for a period of five years, and by Sage Engineers and Land  
13 Planners for four years. In 1959, I was one of the founders of  
14 Atlas Engineers, Inc. and for six years functioned as president.  
15 In 1966, L. T. Christian and I formed the consulting engineering  
16 and surveying firm of Christian, Spring & Associates, which  
17 became Christian, Spring, Sielbach & Associates in 1968.

18 I am a Registered Land Surveyor in Montana, Wyoming and  
19 Colorado, and I presently function as president and general  
20 manager of Christian, Spring, Sielbach & Associates. Our firm  
21 numbers from 60 to 70 full time employees and has been associated  
22 with a wide variety of projects throughout the years. Some of  
23 our more noteworthy projects include:

24 A major land development program for Forbes, Inc. in  
25 southwestern Colorado. More than 10,000 recreational  
26 housing lots are included in this development, together  
27 with many recreational amenities and a large scale open  
28 space greenbelt area.

1           The design and implementation of industrial parks in  
2 Crow Agency, Browning, Poplar, Butte, Ft. Belknap, Havre  
3 and Billings, Montana.

4           Street, road and highway projects in Browning, Lame  
5 Deer, Ft. Belknap, Hardin, Crow Agency, Glendive (Makoshika  
6 State Park) and Billings, all in Montana, and Ft. Garland,  
7 Colorado.

8           Comprehensive Utility Study and/or Facility Plan (overall  
9 sewage treatment plan) for Sheridan, Colstrip, Livingston,  
10 Browning, Poplar, Deer Lodge and Big Horn National Park,  
11 all in Montana; Lovell, Wyoming, and Custer State Park,  
12 South Dakota; and El Salvador, San Salvador.

13          Design and implementation of utility system, water  
14 treatment or waste water treatment facilities at Ft. Belknap,  
15 Poplar, Livingston, Crow Agency, St. Marys Lake, Gregson,  
16 Havre, Browning, Miles City, Lame Deer, Rocky Boys Indian  
17 Reservation, Big Timber, Pablo, Dixon, Yellowstone National  
18 Park and Billings, all in Montana, and Grand Teton Lodge  
19 Company, Jackson, Wyoming.

20          Exploration and route surveys for Johns-Manville, Inc.,  
21 Western Energy Co., Permian Corporation, Bonneville Power  
22 Administration, Continental Oil Company, Montana Power  
23 Company, Western Oil Transportation, Northern Pacific  
24 Railroad, Anaconda Mining Company, Wyo-Ben Products, Inc.,  
25 Amax Coal Company, Pacific Power and Light Co., and Tenneco  
26 Coal Company in Montana, Wyoming and Washington.



1           During February of 1973, Christian, Spring, Sielbach &  
2 Associates along with two other Billings firms were hired by  
3 Western Energy Company, a wholly owned subsidiary of The Montana  
4 Power Company, to provide engineering, architectural and landscape  
5 planning services for the town of Colstrip. Western Energy  
6 Company was incorporated in 1966 to operate and maintain the  
7 Colstrip properties which had been acquired earlier by The Montana  
8 Power Company. The Colstrip properties were assigned at that  
9 time to Western Energy Company.

10           The reason for Western Energy's hiring of our firm, along  
11 with the two others, was basically to implement a general master  
12 plan which had been prepared by Ken R. White Company of Denver,  
13 Colorado, previous to the February, 1973, date. This was done  
14 to provide for the orderly development of Colstrip. The master  
15 plan of Ken T. White Company appears as Applicants' Exhibit No. 37.  
16 In order to implement the plan, a joint venture was instituted  
17 consisting of three Billings, Montana, firms, our firm of  
18 Christian, Spring, Sielbach & Associates, the firm of Wirth  
19 Associates, and the firm of Drake, Gustafson & Associates. Our  
20 firm was charged primarily with the civil engineering, Wirth  
21 Associates was charged primarily with the final master plan and  
22 landscape planning, and Drake, Gustafson & Associates was  
23 charged primarily with the architectural services. All three  
24 firms were involved in the refinement and practical application  
25 of the overall master plan.

26           The firm of Wirth Associates was established in 1961 by  
27 Mr. Theodore J. Wirth to provide a unified professional approach  
28 to the ever increasing concerns regarding the relations between

1 people, land use, and the natural environment.

2 The current, in-house staff of Wirth Associates is comprised  
3 of a professional group of over twenty landscape architects,  
4 architects, planners, and other professions, and a technical  
5 staff of approximately twenty.

6 Wirth Associates has been involved in a broad scope of  
7 natural resource and land planning projects in every region of  
8 the United States. These range from general urban and rural land  
9 use planning to park and recreational projects, university campus  
10 design, resort development, power plant and transmission line  
11 planning, visitor information centers, and various Environmental  
12 Impact Reports and Statements.

13 The firm of Drake, Gustafson & Associates was founded in  
14 Billings, Montana, in 1955, to practice architecture. The firm  
15 now is comprised of the two principals, five registered, graduate  
16 architects and eight technicians.

17 Since the formation of the firm, the clientele has grown to  
18 include various agencies of the United States Government, institu-  
19 tional, commercial and private interests. The projects completed  
20 to date have included banks, schools, motels, shopping centers,  
21 churches, hospitals, publishing facilities, office buildings,  
22 restaurants, condominiums, apartment buildings and many private  
23 residences.

24 A brief chronological history of the town of Colstrip  
25 follows:

26 1923 - Construction began on town of Colstrip.

27 1924 - Coal mine opened by Northern Pacific Railroad.

28



1 1923 to 1950 - Town construction period, heaviest activities  
2 are in late 1920's and early 1940's and are associated  
3 with the production of coal.

4 1958 - Coal mining ceases due to switch to diesel loco-  
5 motives.

6 1959 - Montana Power Company purchased mining machinery,  
7 coal leases and town of Colstrip.

8 1966 - Western Energy Company incorporated as a wholly  
9 owned subsidiary of Montana Power Company, and  
10 Colstrip properties, including the town, were  
11 conveyed to it by Montana Power.

12 1968 - Mining operations re-established.

13 1971 - Sixty-unit mobile home park constructed.

14 - Ten-acre surface area sewage treatment lagoon  
15 constructed.

16 1972 - Sixty-eight unit mobile home park constructed  
17 (completed in 1973).

18 - Five hundred thousand gallon storage tank is  
19 constructed.

20 - Seventy-five thousand gallon water storage tank is  
21 constructed at mine office, replacing old wood tank.

22 February 15, 1973 - First meeting of joint venture consisting  
23 of Christian, Spring, Sielbach & Associates, Wirth  
24 Associates and Drake, Gustafson & Associates.

25 February 20, 1973 - Began mapping for town project.

26 February 20 to March 24, 1973 - Joint venture worked to  
27 develop an "architectural character" for the town  
28 expansion and worked on plan for multi-family housing.  
Specific attention given to the commercial center -  
motel portion of the plan.

March 24, 1973 - Received authorization from Martin White,  
Western Energy Company project manager, covering  
the following:

1. Computer study of existing and proposed utility  
systems.
2. Testing of existing water system.
3. T.V. inspection of sewer mains and refurbishing  
where required.
4. Overall drainage area study.

-3934-

1           5. Study of stick-built, modular and other types of  
2           housing to determine if occupancy by July, 1973,  
3           is feasible.

4           6. Development of overall Master Plan for Colstrip.

5           April 17, 1973 - Received bids on modular motel units (20),  
6           Kober Construction was low bidder. This was the first  
7           contract for construction after joint venture began  
8           operation.

9           May, 1973 - Bids were received to do the motel site work  
10          (to include foundation, stairs, roof, etc.) (Jimco  
11          Construction, Inc. was awarded the contract).

12          - Bids were received to build six 4-plex units  
13          (24 apartments) (Eaton & Yost Construction Co. was  
14          awarded the contract).

15          June - 1973 - Construction continued on motel and 4-plex  
16          units.

17          July, 1973 - Eaton & Yost Construction Co. 4-plex contract  
18          extended to include another three 4-plex units (total  
19          36 apartments).

20          - Bids were received to provide water distribution  
21          system and sewage collection system to serve new motel  
22          and 4-plex units and proposed commercial center, bank,  
23          service station, fire and police station and community  
24          center. (COP Construction Co. was awarded the con-  
25          tract.)

26          August, 1973 - Construction continued on 4-plex units and  
27          utility systems.

28          September, 1973 - Contract for the construction of 15 single-  
family houses is awarded to Boise Cascade Corporation

            - Eaton & Yost Construction Co. is awarded  
contract for five single family houses

            October, 1973 - COP Construction Co. is low bidder on site  
work, paving and storm drainage project. Project is  
to provide streets and parking lots and storm drainage  
for commercial center, 4-plex housing and 15 unit  
housing area.

            A pedestrian underpass and a portion of the bike path  
system were also included in the project.



1                   - A contract was negotiated with COP Con-  
2                   struction Co. to provide a 10" water main and 26  
3                   individual services on the east side of town.

4                   November, 1973 - A contract was negotiated with COP  
5                   Construction Co. to provide a sanitary sewer system  
6                   in the 15 unit housing area.

7                   December, 1973 - Bids were received for the construction  
8                   of the Commercial Center, which included a grocery  
9                   store, restaurant, hardware store, doctor and dentist  
10                  facilities, post office, drug store, offices and  
11                  general merchandise.

12                  - A contract was negotiated with COP  
13                  Construction Co. to provide a 10" and 12" water  
14                  main on the west side of town, 15 individual water  
15                  services and sanitary sewer mains.

16                  January, 1974 - Construction of 35 houses was awarded to  
17                  Kober Construction. Houses are of modular construction.

18                  February, 1974 - Construction continues on various contracts,  
19                  as weather permits.

20                  - Construction of Lutheran Church is begun.  
21                  Labor is provided by volunteer workers.

22                  March, 1974 - Construction continues as weather permits.

23                  - Contract is awarded for the construction of  
24                  a 2,000 square foot steel office building for Western  
25                  Energy Company. Palmer Steel is contractor.

26                  April, 1974 - Construction activity in all phases picks up  
27                  due to improving weather conditions.

28                  May, 1974 - COP Construction Co. is low bidder on north end  
29                  street paving, water distribution system, sewage  
30                  collection system, storm drainage improvements. Pro-  
31                  ject also includes the same entities in the south  
32                  8-plex area, but on a smaller scale.

33                  - Eaton & Yost Construction Co. is awarded 14  
34                  more single family houses.

35                  - George Matz is awarded a landscaping contract  
36                  in the 4-plex area.

37                  May 6, 1974 - Carpenters union goes on strike which precipi-  
38                  tates other strikes. By May 17, 1974, all contractors  
39                  in the Colstrip area are shut down because of the  
40                  strike.

41                  June 27, 1974 - Most contractors resume work upon cessation  
42                  of strike.

1 July, 1974 - Construction in all phases is in full swing.

2 - Contract entered into with COP Construction  
3 Co. to build a 38 unit mobile home court

4 August, 1974 - 15 Additional single family houses  
5 awarded to Eaton & Yost Construction Co.

6 - Three 8-plex units are awarded to Eaton &  
7 Yost Construction Co.

8 September-November, 1974 - Construction continues in all  
9 phases.

10 December, 1974 - Kober Construction is awarded ten additional  
11 single family houses.

12 - Eaton & Yost Construction Co. is awarded  
13 two additional houses.

14 January, 1975 - Preliminary subdivision plats of Colstrip  
15 are approved by the County Commissioners, Rosebud County.

16 - Construction contract for water treatment  
17 plant transmission main awarded to COP Construction  
18 Co.

19 February, 1975 - Contract awarded for the construction of  
20 the water treatment plant to Phil Morrow, Contractor.

21 - Construction continues as weather permits.

22 February 5, 1975 - Prepared a drawing and legal description  
23 of a proposed mobile home park site immediately south  
24 of the Colstrip townsite proper.

25 March, 1975 - Construction continues as weather permits.

26 March 19, 1975 - Prepared an exhibit showing areas available  
27 within Colstrip townsite for additional churches

28 April, 1975 - Construction activity in all phases is in  
full swing.

April 22, 1975 - A Certificate of Dedication of Colstrip  
Townsite, Sheets 1 through 4, is prepared and sent to  
Mr. John Carl, Attorney, Western Energy Company.

May, 1975 - Construction plans and specifications for site  
work, utilities and parking lots for two additional  
4-plex housing units are completed and agreement for;



1 performing said work is negotiated with COP Con-  
2 struction Company.

3 - The 4-plex buildings are awarded to Kober  
4 Construction Co. after a competitive bid.

5 June, 1975 - Flood plain data is transmitted to Mr. James  
6 T. Slavin, appraiser, Spokane, Washington. Mr. Slavin  
7 is an independent appraiser reviewing the Colstrip land  
8 values as part of the Bureau of Outdoor Recreation  
9 plan to participate in the development of the Colstrip  
10 park system.

11 - Construction of Community Center begins.

12 July, 1975 - Construction plans and specifications are begun  
13 for a 30 unit mobile home park immediately south of  
14 the Colstrip townsite.

15 August, 1975 - Bids are received for the construction of the  
16 proposed 30 unit mobile home court. COP Construction  
17 submits the low bid.

18 - All paving within townsite is completed.

19 August 4, 1975 - Plats covering Colstrip townsite, sheets  
20 1 through 5, filed in the office of the County Clerk  
21 and Recorder, Rosebud County, Montana. The plats sub-  
22 stantially conform to the Master Plan prepared by the  
23 joint venture (Applicants' Exhibit No. 38) with the  
24 exception of minor deviations in the location of  
25 various facilities.

26 September 4, 1975 - Cost estimates are prepared and sub-  
27 mitted to Western Energy Co. for the construction of  
28 the following: water treatment plant expansion,  
sewage treatment facility expansion, Armells Creek  
improvements, Willow Street intersection completion and  
the reconstruction of Pine Street. These cost esti-  
mates prepared for the proposed budget for year 1976.

September 8, 1975 - Transmitted to Mr. John Carl, Attorney,  
Montana Power Company, prints showing existing Lutheran  
Church site (Block 29, Colstrip Townsite, Sheet No. 3)  
and proposed Mormon Church site (Block 47, Colstrip  
Townsite, Sheet No. 5).

October 2, 1975 - Mike Potter, Wirth Associates, prepares  
a plan showing proposed expansion of the Colstrip  
Commercial Center area. The plan includes a theater,  
grocery store and several smaller shops.

October, 1975 - Prepared a plan showing what water and  
sewer main alterations will be necessary should pro-  
posed Commercial Center expansion be implemented.

1  
2 November 7, 1973 - Prepared drawings and legal  
3 descriptions of Community Center site (portion  
4 of Tract 11, Colstrip Townsite, Sheet No. 1)  
5 and proposed storage yard (portion of Tract 18,  
6 Colstrip Townsite, Sheet No. 5).

7  
8 November 18, 1975 - transmitted revised drawing and  
9 legal description of proposed service station site  
10 to Western Energy Company (Block 31, Colstrip  
11 Townsite, Sheet No. 1).

12 November 26, 1975 - Transmitted proposed Armells Creek  
13 channel change data to Western Energy Company,  
14 Colstrip.

15 December 1, 1975 - Joint venture disbanded.

16 December 9, 1975 - Last joint venture meeting conducted  
17 to finalize remaining details.

18 As noted above, the joint venture was disbanded as of  
19 December 1, 1975 because the purposes for which it was formed  
20 had been completed. The three entities comprising the joint  
21 venture, however, will continue to do work for Western Energy  
22 Company at the town of Colstrip but on an individual contract  
23 basis, as requested.

24 As of the end of December, 1975, approximately 80% of  
25 the master plan for the town of Colstrip prepared by the joint  
26 venture had been completed insofar as construction was concerned.  
27 Items which remain to be completed as of December 24, 1975 are  
28 as follows:

Community Center - complete interior and exterior  
finishing.

Landscaping - various housing areas are not landscaped  
as yet, although the contracts have been awarded. This  
work should be completed in the spring of 1976.



1  
2  
3 Landscaping - the landscaping of parks is being  
4 performed in conjunction with the Bureau of Outdoor  
5 Recreation. All park amenities and landscaping should  
6 be completed by fall, 1976.

7  
8 Housing - there are 61 vacant lots remaining in the  
9 north end of Colstrip. Forty-two of these lots  
10 require utilities and 38 require street improvements.  
11 It is expected that all of these lots will be  
12 developed by private builders, rather than by  
13 Western Energy Company.

14  
15 Housing - an additional 41 single family lots may be  
16 developed in the south Colstrip area, just south and  
17 east of the existing multi-family area. All of these  
18 lots will require utility and street improvements  
19 for development. It is expected that this area will  
20 be developed by private builders rather than  
21 Western Energy Company.

22  
23 Streets - there remains a small amount of street  
24 and parking lot construction to be done as part of  
25 the Central Park improvement program. This work is  
26 scheduled to be completed in mid-1976.

27  
28 Sewage Treatment Expansion - it will be necessary  
to expand the existing sewage treatment facility  
in the near future in order to handle the anticipated  
volume of sewage. It is my understanding that a sewer  
district will be created and that the expansion will  
be completed under the auspices of this district.

Water treatment Plant Expansion - a new 1,000 gallon  
per minute water treatment plant has recently been  
completed in Colstrip and has been in operation since  
June, 1975, although the building and other appurtenances  
were completed more recently. It may be necessary to  
add further, more complex types of chemical treatment  
to the plant in the future to maintain an acceptable  
degree of water purification. At this time, it is  
not known if such additional treatment will be  
required.

1       It is my belief that the town of Colstrip presently is and  
2 will continue to be the most completely planned community in the  
3 state because the plan includes all utilities, streets, parks,  
4 tot lots, bikeways, tennis courts, controlled accesses, a commer-  
5 cial center, community center building (including basketball court  
6 handball court, olympic size swimming pool, shower and locker  
7 rooms), both single family and multi-family housing, trailer  
8 courts, parkways, a water system, sewage system, storm drainage  
9 control, flood plain study, irrigation system and landscaping.

10       Applicants' Exhibit No. 38 titled "The Master Plan, Colstrip,  
11 Montana" is a drawing showing the master plan for the town pre-  
12 pared for Western Energy Company by the joint venture. It is true  
13 and correct. North is shown by the arrow in the lower left corner  
14 and some of the key points on the exhibit can be identified as  
15 follows: the three circular objects approximately three-fourths  
16 from the bottom on the right hand side are sewage lagoons serving  
17 the town; the building in the large open space in the middle of  
18 the master plan sheet, on the left side, is the school and the  
19 school expansion area. Western Energy Company has donated 8.8605  
20 acres to the school district to be used as expansion area.

21       The buildings just below the school area on the left side  
22 comprise the Commercial Center. Some of the elements within the  
23 center are a 20 unit motel, medical and dental facilities, drug  
24 and hardware store, business offices, laundromat, post office,  
25 proposed grocery store, a crafts shop and a full service bank.  
26 The portion planned for a future restaurant is now used as school  
27 classrooms.

28       Central Park is located in the middle of the sheet on the



1 right side. Double tennis courts have been completed and are in  
2 use in this park. The large and very attractive community center,  
3 located in the east end of the park, is nearing completion. This  
4 building features a basketball court, handball court, meeting  
5 rooms, locker rooms and shower rooms. An olympic size swimming  
6 pool and change building are proposed for construction in 1976.  
7 Also proposed for construction are a complex of curvelinear side-  
8 walks, a kiosk, several "sitting areas" or plazas, picnic facili-  
9 ties, floral displays (flower beds) and off-street parking for  
10 98 cars. The sidewalk system will be tied into the overall  
11 community bikeway system.

12 South Park is a 30 acre open space and park facility which  
13 is interspersed throughout the entire southern one-third of the  
14 community. A softball diamond, a tot lot and a substantial amount  
15 of the bikeway system have been completed at this time. Items  
16 which are scheduled for 1976 construction include a little league  
17 diamond, a multi-purpose playfield, picnic facilities, basketball  
18 courts, several tot lots, bleachers, additional bikeway system,  
19 a comfort station and several parking lots.

20 An additional 15 acres of park are distributed throughout  
21 the northern one-third of the community. A single tennis court  
22 has been completed in North Park. Scheduled for 1976 construc-  
23 tion are several tot lots, basketball courts, picnic areas and  
24 an extensive bikeway system.

25 Generating Units 1 and 2 are not shown on the exhibit because  
26 they are located some distance away in an easterly direction from  
27 the town.

28 Applicants' Exhibit No. 39 is an aerial photograph of the

1 town of Colstrip taken on June 28, 1975. It covers area in addi-  
2 tion to that covered by the master plan (Exhibit No. 38). The  
3 scale of Exhibit No. 39 is approximately 1" = 400'. The Colstrip  
4 generating units are shown slightly right of the center of the  
5 photograph. The exhibit is a true and correct representation of  
6 the area it purports to show.

7 Applicants' Exhibit No. 40 is a street plan and profile of one  
8 of the streets located in the town of Colstrip. It comprises Sheet  
9 No. 7 of a total of 35, which constitutes the complete set of con-  
10 struction plans for the bid won by COP Construction Co., in May,  
11 1974. Exhibit No. 40 was chosen to represent a typical street  
12 plan and profile and to indicate the amount of detail and work  
13 involved in the street planning. The exhibit was prepared under  
14 my supervision, direction and control and is true and correct.

15 Applicants' Exhibit No. 41 shows the landscape plan for the  
16 4-plex area including the billeyway, tot lot, sidewalks and the plant-  
17 ings of the plants, shrubs and trees. It is typical of the planting  
18 plan of the residential areas in the town of Colstrip. It was pre-  
19 pared by Wirth Associates, one of the members of the joint venture,  
20 and is true and correct.

21 Applicants' Exhibit No. 42 is the landscape design for the com-  
22 mercial center area and shows the various amenities such as foun-  
23 tain, kiosks, sidewalks and plantings, including trees and shrubs,  
24 for the area involved. The exhibit was prepared by Wirth Associates,  
25 one of the members of the joint venture, and is true and correct.

26 Applicants' Exhibit No. 43 is a typical plan and profile  
27 sheet for the commercial center storm drainage. It shows some  
28 of the detail of the drainage system prepared for the area involved



1 and was prepared under my supervision, direction and control and  
2 is true and correct.

3 Applicants' Exhibit No. 44 is the plans for the pedestrian  
4 underpass which is located beneath Willow Street south of the  
5 commercial center. Its purpose is to allow pedestrians from the  
6 housing area south of Willow Street (the future main access to  
7 the town) to cross Willow Street without conflict with potentially  
8 heavy traffic. The exhibit was prepared under my supervision,  
9 direction and control and is true and correct.

10 Applicants' Exhibit No. 45 is a sketch of a typical residen-  
11 tial street in the Colstrip area. The sketch shows the street,  
12 trees, pavement and houses in a typical area. The houses are  
13 single family houses typical of the planning. The exhibit was  
14 prepared by Drake, Gustafson & Associates, one of the joint  
15 venture parties, and is true and correct.

16 Applicants' Exhibit No. 46 is a sketch of typical 4-plex  
17 apartment buildings planned and built in the Colstrip area. The  
18 exhibit was prepared by Drake, Gustafson & Associates, one of the  
19 joint venture companies, and is true and correct.

20 Applicants' Exhibit No. 46-A is a sketch of one of the  
21 8-plex units being built in Colstrip. It was prepared by Drake,  
22 Gustafson & Associates, one of the joint venture parties, and is  
23 true and correct.

24 Applicants' Exhibit No. 46-B is the landscape design for  
25 Central Park and shows the various amenities such as basketball  
26 court, tennis courts, swimming pool, bath house, plazas, picnic  
27 facilities and plantings, including trees and shrubs, for the  
28 area involved. The exhibit was prepared by Wirth Associates, one

1 of the members of the joint venture, and is true and correct.

2 Applicants' Exhibit No. 46C is the landscape design for  
3 South Park and shows the various amenities such as a softball  
4 field, tot lot, basketball and volleyball facilities, picnic  
5 area and plantings, including trees and shrubs, for the area  
6 involved. The exhibit was prepared by Wirth Associates, one  
7 of the members of the joint venture, and is true and correct.

8 Applicants' Exhibit No. 46D is a sketch of the commercial  
9 center area and shows the various amenities such as Fireman's  
10 Park Fountain, kiosks, sidewalks and plantings, including trees  
11 and shrubs, for the area involved. The exhibit was prepared by  
12 Wirth Associates, one of the members of the joint venture, and  
13 is true and correct.

14 The Ken R. White Company master plan referred to above  
15 contemplated the construction of only Colstrip Units 1 and 2  
16 but it did identify additional areas immediately north of  
17 Colstrip for future expansion if necessary. Our planning  
18 proceeded upon the basis of Colstrip 1 and 2 being constructed.  
19 The Ken R. White Company Plan for Colstrip, Montana, and the  
20 Master Plan prepared by the joint venture (Applicants' Exhibit  
21 No. 38) were prepared with the thought that the permanent popula-  
22 tion of Colstrip would be approximately 1,800. Any further  
23 expansion would necessarily be to the north and west of the town.

24 Our original instructions from Western Energy Company were to  
25 prepare a refined master plan based on the Ken R. White original  
26 plan, along with necessary subordinate plans, drawings and specifica-  
27 tions, so that the town of Colstrip would provide an attractive com-  
28 munity for the people living there. It is my opinion that this has bee

1 accomplished. If proper planning had not been implemented,  
2 undoubtedly the town of Colstrip would have evolved like many  
3 other towns affected by rapid growth with attendant congestion  
4 and conflicting land uses.



1                                    EXAMINATION OF JAMES B. SPRING

2   Cross, by Department of Natural Resources and Conservation

3   By Mr. Shenker:

4   Q   Mr. Spring, you're the President of Christian, Spring,  
5        Seilbach & Associates, of Billings?

6   A   Yes.

7   Q   Mr. Bellingham and his law firm represent your firm, isn't  
8        that correct?

9   A   In some things, yes.

10   Q   You have no degree in engineering, do you, Mr. Spring?

11   A   No.

12   Q   Nor do you have a degree in land use planning?

13   A   No.

14   Q   Or any other planning function?

15   A   No.

16   Q   You're a surveyor?

17   A   Right.

18   Q   Your firm has done quite a bit of work for a number of  
19        utility companies in recent years, has it not?

20   A   Yes.

21   Q   One of the three firms that operated in the joint venture for  
22        doing the work in which you were involved for Colstrip was  
23        a firm called Wirth Associates, isn't that correct?

24   A   Yes.

25   Q   And that firm does have a number of planners on its staff,  
26        isn't that correct?

27   A   Yes.

28   Q   Indeed, your firm has a couple of planners on its staff, too?



1 A Planners, but not planners that are totally capable like his  
2 planners are. They're not licensed or educated planners with  
3 a degree.

4 Q Did some of the Wirth Associates' planners plan?

5 A Repeat that please?

6 Q Did some of the Wirth Associates' planners plan in connection  
7 with the Colstrip project?

8 A Yes.

9 Q Who were they?

10 A Mike Potter and Mr. Ted Wirth, himself. Mike Potter, and  
11 there was others on the staff, but those are the two main ones.

12 Q Are they gentlemen in good health?

13 A Yes.

14 Q In the Billings area?

15 A Yes.

16 Q Now, of course, the final master plan in which you and the  
17 two other firms were involved in the joint venture was a  
18 final master plan in connection with the Colstrip units 1 & 2;  
19 that's correct, isn't it?

20 A The master plan of the townsite, yes.

21 Q Yes, and in connection with the Colstrip units 1 & 2?

22 A Yes.

23 Q As far as you know as of this very moment, Mr. Spring, is  
24 there a master plan in connection with the Colstrip units  
25 3 & 4?

26 A No, not that I'm aware of.

27 Q In the chronology which you list in your statement of  
28 testimony, sir, you do not list the employment of the Ken R.

1 White Company or when they came into the picture. Do you  
2 know when that occurred?

3 A No, I don't know.

4 Q On page 9 of your statement, Mr. Spring, under date of  
5 September 4, 1975, you refer to work done on Armell's Creek  
6 improvements. Can you tell me what that was?

7 A Do you know what the work was that was completed, or --

8 Q What were the improvements?

9 A The improvements have not been made on Armell's Creek yet.  
10 You're talking about design or construction?

11 Q Well, I'm trying to find out what the language means on  
12 September 4, 1975. Do I take it to mean that there were some  
13 estimates prepared in connection with Armell's Creek improve-  
14 ments, but no work was done?

15 A Right. They were cost estimates for preliminary design  
16 criteria for some items on Armell's Creek.

17 Q What were those items?

18 A They were some redraining, regrading, some flood plain con-  
19 siderations.

20 Q Why was that necessary?

21 A At the time our firms, or our joint venture was hired to  
22 work on the master plan at Colstrip, one of our earliest  
23 concerns was a flood plain analysis of Armell's Creek, and  
24 from that we made recommendations for the correction of some  
25 of the flood plain problems that we foresaw. They're not  
26 major; they're very minor.

27 Q As far as you know, that work has not been done?

28 A Not yet, no.

1 Q And as I understand it from your statement, Mr. Spring, for  
2 the last couple of months you and the other two venturers  
3 to the work that was done at Colstrip have no longer been  
4 at work there, is that correct?

5 A The join venture was disbanded December the 1st, but we're  
6 still doing some minor projects. As needs come up, they ask  
7 us to do a project at a time.

8 Q What kind of work are you involved in now at Colstrip?

9 A Preliminaries on the sewage treatment plant -- and these are  
10 just very minimum activities right now. Occasionally there's  
11 a phone call for certain questions about some phases of the  
12 construction. That's about all.

13 Q Did any part of your work or the work of any of the venturers  
14 in connection with the project at Colstrip have to do with  
15 planning for the City of Forsyth?

16 A No.

17 Q Did any part of your work have to do with the planning for  
18 Rosebud County outside of the town of Colstrip?

19 A No.

20 Q In connection with the housing that has been one of your  
21 firm's functions in the joint venture, can you give us an  
22 idea of the range of the costs of the houses that have been  
23 offered for sale?

24 A That have been offered for sale?

25 Q Yes, sir.

26 A I don't know of any particular houses that have been offered  
27 for sale, other than one or two individuals that were particu-  
28 lar circumstances, and I don't know the costs of their housing.



1 You're talking about the houses on site, or those that will  
2 be offered for sale, if they are?

3 Q Well, I was first talking about the houses on site, and you  
4 tell me there are only a couple of those. Let's go next to  
5 the houses that will be offered for sale. Do you know the  
6 range of prices for those?

7 A Well, it would range -- as far as the construction, they would  
8 range probably from \$26,00, \$28,000 to \$35,000 -- maybe higher  
9 than that?

10 Q Do you know what the sale prices are?

11 A No, I don't have any idea.

12 Q You would expect them to be somewhat in excess of the construc-  
13 tion cost?

14 A I would think. I don't know.

15 Q Do you know, Mr. Spring, whether any decisions have been made  
16 as to priorities for the sales of the houses?

17 A For individual houses or for the whole basic concept of  
18 selling the townsite?

19 Q Either way, sir, whether there have been any priorities  
20 indicated on who should be the buyers by first choice, second  
21 choice, first option, second option -- whatever category?

22 A I'm not aware of any priorities, no.

23 Q Do you know of any discussions that have taken place on  
24 provisions in the potential resale of a home that is initially  
25 purchased?

26 A Just some casual conversation. We've never been involved in  
27 any part of that, so --

28 Q Who has?

1 A Western Energy people; our joint venture was not.

2 Q Do you understand the master plan, to the extent that you  
3 have been involved in it -- limited to Colstrip 1 & 2, in  
4 fact, as I understand it -- at the end of the work will there  
5 be a jail in Colstrip?

6 A A jail?

7 Q Yes.

8 A There is a police station planned into the master plan, but  
9 whether -- the original discussion was to house one or two,  
10 maybe two cells, but that's never been finalized or had  
11 further discussions on it.

12 Q How about a hospital?

13 A A hospital, no.

14 Q What about a medical clinic?

15 A There are medical offices available presently at Colstrip.

16 Q There's one office now where a doctor arrives for 3 hours on  
17 one morning one day a week.

18 A Yes.

19 Q Is that what you mean by offices?

20 A Yes.

21 Q And that's in the complex of the commercial unit where there's  
22 a country store, where there's a couple of school classes  
23 meeting?

24 A Yes.

25 Q In your statement, Mr. Spring, on page 12, at the top of  
26 the page, you state your belief that the town of Colstrip  
27 will continue to be the most completely planned community in  
28 the state. I take it that a more complete statement of your

1 belief is that it will be the most completely planned commun-  
2 ity in the state, without a jail, hospital, doctor, or plan-  
3 ning office?

4 A I was referring to a town of similar size in the state of  
5 Montana, and I do firmly believe that it's one of the most  
6 thoroughly developed and planned towns in the state of Montana,  
7 without question.

8 Q I think it's pretty clear from your statement, Mr. Spring, that  
9 you don't project any size of the town of Colstrip as a result  
10 of the involvement of Colstrip units 3 & 4. Would I correctly  
11 infer that from your statement?

12 A Yes.

13 Q Do you know of any projections that have been made for the  
14 size of that town as a result of those units being built there?

15 A Population or town development priorities?

16 Q Both.

17 A As far as population, yes, I've read the estimated population  
18 figures in a copy, a 1-page copy received of the Westinghouse  
19 Report, and I've heard other comments, but that's all, and  
20 as far as priorities, I don't know of any.

21 Q Let's see, your firm is a corporation, is it not, Mr. Spring?

22 A Yes.

23 Q There are six shareholders in it still?

24 A Yes.

25 Q Are those the members of the firm?

26 A Yes.

27 Q Is one or more of the shareholders a planner in your firm?

28 A No.



1 Q Your first involvement with the development of Colstrip was  
2 in 1968, was it not?

3 A Approximately; right.

4 Q And at that time your firm was asked to collect data for  
5 3 or 4 locations for power generating facilities at Colstrip,  
6 all within very close proximity to the town of Colstrip itself?

7 A The very first work we had in Colstrip? No.

8 Q Well, the very first work you did was to make field studies  
9 to determine the mining pit location and quantities?

10 A Yes.

11 Q Thereafter you were asked to collect data for 3 or 4 various  
12 locations for the power generating facilities?

13 A We were asked to collect data. We did not know at the time  
14 whether it was for the power generating facilities or whether  
15 it was for dam sites, or what. We were just asked to collect  
16 data.

17 Q You later learned that it was for the generating facilities?

18 A Parts of it was for the generating facilities, and parts of  
19 it was for potential dam sites.

20 Q Did you learn what those dam sites were to be used for?

21 A Reservoirs.

22 Q And the locations of these various facilities were within  
23 about a mile or so of the town of Colstrip; is that right?

24 A Yes.

25 Q At that time did the Western Energy Company or the Montana  
26 Power Company tell you that they had looked for other sites  
27 in the state of Montana for coal-fired generating facilities?

28 A No, I never heard that.

1 Q When you were first retained by the Western Energy Company  
2 you were told that you would be working only on the Colstrip  
3 units 1 & 2; isn't that right?

4 A Yes, on the townsite.

5 Q And your first knowledge of any plans for the development of  
6 the Colstrip units 3 & 4 was when you read about it in the  
7 newspaper?

8 A As near as I can recollect.

9 Q There's a sewage lagoon being designed as part of the plans  
10 for Colstrip, isn't there?

11 A The sewage lagoon is designed and constructed.

12 Q Yes, and that's designed for somewhere between 800 and 1200  
13 people, is it not?

14 A Approximately in that area, yes.

15 Q You have been instructed, of course, not to design past the  
16 stage of development of Colstrip units 1 & 2, haven't you?

17 A Yes.

18 Q Do I understand correctly, sir, that your firm had no input  
19 with respect to the projected conclusions of the Ken R. White  
20 Plan?

21 A Yes, we were not involved.

22 Q The Ken R. White Plan, which is entitled "The Plan for  
23 Colstrip, Montana," of course, is also restricted to the  
24 Colstrip units 1 & 2, isn't it?

25 A Yes.

26 Q And in that plan there were some land uses on which your  
27 firm made some recommendations, is that not true?

28 A Yes.

1 Q When the master plan was formulated for the town of Colstrip  
2 in connection with the Colstrip units 1 & 2, Western Energy  
3 Company told your firm what was required, as far as living  
4 units and facilities, such as shopping centers, motels, etc.,  
5 but they didn't tell you where to locate those facilities;  
6 isn't that the size of it?

7 A Mostly. In some cases there's recommendations to them from  
8 our joint venture of some other facilities, but it was a joint  
9 effort on developing the master plan.

10 Q When your joint venture made recommendations, the Ken R.  
11 White Company did not join in those, did they?

12 A No, not to our knowledge.

13 Q And population projections were outside the scope of what  
14 your joint venture was working on, is that correct?

15 A Were outside the scope?

16 Q Yes. You weren't hired to make population projections?

17 A Oh, no; no.

18 Q Are you familiar with any recommendations made by the Ken R.  
19 White Company as to a rather expanded version of the study  
20 which they were asked to do?

21 A No.

22 Q Did you know that the project director for the Ken R. White  
23 Company, in connection with the plan for Colstrip, had  
24 expressed his dissatisfaction with the limitations placed  
25 upon the study?

26 A No.

27 Q Do you know who the project director was?

28 A No, I don't.



1 Q In January of last year, Mr. Spring, there was some delay on  
2 the housing and sewage programs at Colstrip as a result of  
3 instructions from Western Energy. Was the schedule accelerated  
4 some time thereafter?

5 A During that time we were asked to hold up certain parts of  
6 it, and later on we were authorized to go ahead on some parts,  
7 and some parts we were not.

8 Q What parts were you not authorized to go ahead with?

9 A What they refer to as the "north end housing area."

10 Q Why?

11 A I'm not sure I exactly know why. I know that during the  
12 time there were various considerations going on, but I cannot  
13 answer why.

14 Q What were the considerations going on?

15 A Within the Western Energy-Montana Power people.

16 Q What did they tell you?

17 A Well, there were some considerations about whether they should  
18 develop it themselves or make the land available to other  
19 developers, and that's basically, as near as I can tell,  
20 what the holdup was for.

21 Q Do I understand, sir, that in the course of the work done by  
22 the Westinghouse Environmental Systems department you and your  
23 firm communicated no information to the Westinghouse folks?

24 A That is correct.

25 Q Do I also understand correctly that your firm took no tests  
26 to determine the noise levels that residents in Colstrip  
27 would be subjected to by the operation of a generating plant?

28 A That's correct.

1 Q And you do now know whether any noise tests at all have been  
2 done?

3 A Not to my knowledge, no.

4 Q I take it that no special measures were provided in the  
5 design or construction specifications in order to reduce  
6 noise?

7 A Not specifically, no.

8 Q Now, the sewage pond at Colstrip is about a half mile from  
9 the closest part of the existing town lines in Colstrip; is  
10 that correct?

11 A That's reasonable. I don't know the exact distance.

12 Q Do you still know nothing about the waste products associated  
13 with the transmission or generation of electrical power?

14 A No.

15 Q And I take it you know of no permeability tests conducted on  
16 the sewage pond site?

17 A On the sewage pond site?

18 Q Yes.

19 A Yes, we had permeability tests taken at the time we were  
20 designing the sewage lagoon.

21 Q What was the purpose of conducting such tests?

22 A Just strictly for design criteria.

23 Q What did you find as a result of those tests?

24 A I couldn't say at this time. They were completed by a  
25 testing laboratory, and I would not know without having a  
26 copy of that report in front of me.

27 Q Was it Northern Laboratories that did that testing?

28 A Northern Testing Laboratory, but they were strictly for our

1 own inhouse use for sewage design, for the lagoon design.

2 Q Was any permeability test conducted on the surge pond site?

3 A That I cannot tell you.

4 MR. SHENKER: Okay, Mr. Spring, thank you very  
5 much, sir. I have no further questions and I have no  
6 objections to any of the proffered exhibits.

7 HEARINGS EXAMINER: Very well, Exhibits 38 through  
8 46, 46-A, -B, -C, and -D are admitted. Redirect, Mr.  
9 Bellingham?

10 (BRIEF RECESS)

11  
12 Redirect, by Applicants

13 By Mr. Bellingham:

14 Q Do you have any engineers in your organization?

15 A Yes.

16 Q Prior to going into that, approximately how many employees  
17 does your firm -- that is, the firm of Christian, Spring &  
18 Seilbach -- employ?

19 A We'll average between 60 and 70. Our highest has been 77, and  
20 I think we're at 58 right now -- 62, somewhere in there.

21 Q I would guess that probably the ups and downs in total  
22 employees is based somewhat upon the weather and the kind of  
23 work that you have at a certain time; is that right?

24 A That's right. The ups and downs are normally with the field  
25 survey crews.

26 Q Can you tell us in detail the particulars of the education  
27 backgrounds of the people that you do have on your staff?

28 A We have 7 or 8 graduate engineers, with Bachelor of Science



1 degrees. We have 2 construction technology graduates; and  
2 in the engineering section we have 5 or 6 designers who are  
3 quite qualified to do probably 80% of our municipal type  
4 design. Do you want the entire staff?

5 Q Well, if you can.

6 A Draftsmen -- right now, 5 draftsmen, but normally we run from  
7 5 to 9. We have construction people, inspectors, 3 to 5;  
8 a secretarial pool of 3; a fulltime accountant with a  
9 Bachelor of Science degree; we have computer people, 5 people  
10 in our computer section, which one has a degree in math;  
11 we have 5 to 7 people in our aerial section, of which one has  
12 a Bachelor of Science degree in photography out of Montana  
13 State, and others have degrees, but I don't know which exactly  
14 they do have; and then from there, normal survey personnel,  
15 I think we have now 5 or 6 licensed surveyors, and the  
16 rest are qualified survey people.

17 Q All right, thank you. Now, I think you previously testified  
18 on cross that you have not prepared any master plan for units  
19 3 & 4, as such?

20 A That is correct.

21 Q What has been your involvement as far as 3 & 4 are concerned?

22 A Basically very little. In the original contact with the  
23 joint venture and in reviewing the Ken R. White master plan  
24 there were some areas set aside for land use possibilities  
25 in his plan. There were a few discussions towards the latter  
26 part of our joint venture that we were not authorized to do  
27 anything, but we should be thinking about some particular  
28 minimum land use analysis. I do know that a proposal was

1 submitted from the Wirth firm to do a socioeconomic and  
2 land use analysis, but what the status of that is I do not  
3 know, but there were some discussions in this area. Our  
4 firm was not involved in it.

5 Q Now, when you mentioned areas set aside for 3 & 4, where  
6 were those areas?

7 A They were to the north and west, across the highway. They  
8 were just a general descriptive area on a drawing only, in  
9 the Ken R. White Plan.

10 Q Now, then, there has been a question put to another witness  
11 relative to a trailer court being on a flood plain. Are you  
12 familiar with any flood plain in the town of Colstrip?

13 A Yes.

14 Q Would you describe your knowledge of a flood plain and the  
15 relationship of any trailer court to it?

16 A Yes. In our firm design, the first original trailer court  
17 at Colstrip, it was prior to any knowledge of the Ken R. White  
18 Plan or any proposed expansion of the town of Colstrip, an  
19 area was picked onsite. A trailer court was constructed.  
20 At the time we were retained as a joint venture to proceed  
21 with the entire development of the town of Colstrip we  
22 recommended immediately to be authorized to proceed with a  
23 flood plain analysis of Armell's Creek, which was authorized  
24 and we did do this -- the engineers in our office did. We  
25 did find that the 100-year flood plain did include parts of  
26 that original trailer court design. Most of it is very  
27 minimum. There are probably 3 trailers that are seriously  
28 affected, and when I say "seriously," it really isn't of any



1 major concern. There will be some amount of water around  
2 the trailers, but we've never considered it to be a very  
3 major problem. However, we've made recommendations to the  
4 Western Energy for corrections to make sure there was not a  
5 problem. It's very minimum, really. It's not really worth  
6 mentioning.

7 Q Well, when you talk about a flood plain, what are we talking  
8 about?

9 A We're talking about the area that would be covered under a  
10 runoff condition that would be at a particular time in history,  
11 and you do different evaluations -- a 50-year flood plain,  
12 a 100-year flood plain. We're talking about an engineering  
13 analysis or theoretical calculation of what amount of -- the  
14 maximum amount of water that would accumulate in that  
15 particular drainage area at that particular time.

16 Q And you indicated there would be 2 or 3 only that would be  
17 affected, right?

18 A There would be more that would be affected, but only 2 or 3  
19 that would have any major concern -- or any minor concern.

20 Q As far as possible corrective measures mentioned, what could  
21 be done regarding this?

22 A In our recommendations and budget requests, it would be for  
23 regrading, clearing the channel so that the water would flow  
24 freer, and basically very simple corrective measures throughout  
25 the entire portion of Armell's Creek as it crosses through  
26 the town of Colstrip.

27 Q What would be the total cost of that, approximately?

28 A I think our estimate a year ago was around \$40,000 to \$42,000.



1 Q Would that include the entire town area, or just an area  
2 located close to the trailer court?

3 A That would include that area for the trailer court, and also  
4 upstream to the highway, which is across that southern  
5 portion of the town.

6 Q Since your firm was employed by Western Energy relative to  
7 the town of Colstrip, how many trips have you personally  
8 made to Colstrip? Do you have any idea?

9 A I couldn't guess for sure, but I would say 40 -- 50 -- it  
10 could be more.

11 Q Prior to that time, in connection with your other activities  
12 in and about the town of Colstrip, did you make trips to  
13 Colstrip?

14 A Yes.

15 Q How many would you estimate that at?

16 A Well, I would guess totally, from the time we started, it  
17 would be from 50 to 65-70. I don't know for sure. It's  
18 a rough guess.

19 Q And those are your own individual trips?

20 A Yes.

21 Q Those do not include trips made by people working for your  
22 company?

23 A No.

24 MR. BELLINGHAM: No further questions.

25 HEARINGS EXAMINER: Re-cross?

26  
27 Re-cross-examination, by Department of Natural Resources and  
28 Conservation

1     By Mr. Shenker:

2     Q    Mr. Spring, you mentioned something to Mr. Bellingham about  
3           a proposal that the Wirth Associates had made for a socio-  
4           economic and land use study?

5     A    Right.

6     Q    To whom was the proposal made and when?

7     A    I'm not exactly sure of the details, because we were not  
8           involved, but I do know that at the request of Western Energy,  
9           the asked the Wirth Associates to submit a proposal for some  
10          further evaluation, and I know that that regarded land use  
11          analysis and socioeconomic analysis, and that's about the  
12          limit of my knowledge.

13    Q    When was the proposal made?

14    A    Sometime last fall -- late last summer or last fall.

15    Q    Do you know whether the proposal has been accepted or rejected?

16    A    It hasn't been accepted. I don't know that it's been rejected.

17                 MR. SHENKER: Nothing further. Thank you, sir.

18  
19    Re-redirect, by Applicants.

20    By Mr. Bellingham:

21    Q    Do you know if the proposal has been completed?

22    A    Well, as far as the proposal to Western Energy by Wirth, it  
23          is complete, but I think that is the end of it as far as I  
24          know. I don't know of anything after that. I know there's  
25          been discussions, but I don't know what they involved.

26                 MR. BELLINGHAM: No further questions.

27                 HEARINGS EXAMINER: Anything further? If not,

28                         you are excused, sir.

1 (WITNESS EXCUSED)

2 HEARINGS EXAMINER: All right, I think our situation  
3 now with our next witness is what? You need some --  
4 He was not advised he would be in attendance and you need  
5 some time to get your material ready?

6 MR. SHENKER: Yes. I thought he was going to be  
7 here Wednesday. In an hour I can be back with the stuff  
8 from the office and be ready to cross-examine him.

9 HEARINGS EXAMINER: Well, let's recess till 3:00  
10 o'clock. Will that give you enough time to complete  
11 your cross, do you think?

12 MR. SHENKER: Yes.

13 HEARINGS EXAMINER: All right, let's go off the  
14 record a moment. We'll recess until 3:00 o'clock.

15  
16 (RECESS AT 1:45 P.M.)  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28



1           Following a brief recess, the hearing reconvened at 3:00 P.M.  
2 on Monday, February 9, 1976.

3           HEARINGS EXAMINER: Are you ready? (Affirmative  
4 response)

5  
6 JOHN T. EVANS, called as a witness by the Applicants, having  
7 been first duly sworn upon his oath, both as to his written direct  
8 testimony and as to the oral testimony to follow, was examined  
9 and testified as follows:

10  
11           (THE WRITTEN DIRECT TESTIMONY OF MR. JOHN T. EVANS WAS  
12 DIRECTED TO BE INSERTED AT THIS POINT.)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

I am 61 years old and have been employed by The Montana Power Company continuously since 1935, with the exception of a nine-month break from September 3, 1948 to June 3, 1949.

After leaving the University in June 1935, I was employed by the Rural Electrification Administration as a draftsman doing electrical design drafting. In September of 1935, I was employed by The Montana Power Company in their transmission construction department as a laborer. In November of 1935, I was transferred to the Madison Plant as an assistant operator. My duties were to assist the operator in the operation of the Madison Plant, to grease, oil and inspect all electrical equipment in the plant.

-3967-



1 I continued at this position until May of 1940. At that time,  
2 I was transferred to Butte as an operator at the Missouri River  
3 Plant and a short time later, I was transferred to the Butte  
4 Hill Sub as assistant dispatcher.

5 In September 1948, I resigned and accepted employment  
6 with Carpenter Paper Company in Butte. I was re-employed by  
7 The Montana Power Company in June 1949 as an operator at the  
8 Missouri River Substation.

9 November 1, 1949, I transferred into the General Office  
10 Engineering Department; May 1951, I was promoted to Electrical  
11 Engineer; March 1960, I was promoted to Senior Electrical  
12 Engineer; July 1965, I was promoted to Assistant Manager of the  
13 Electrical Engineering Department; 1966, I was promoted to  
14 Manager of Engineering Department; and in 1970, I was made  
15 Assistant Chief Engineer and Manager of Engineering, a position  
16 I hold today.

17 In the present position, I am directly responsible for  
18 all electrical designs in substations, relaying, communications,  
19 automation, transmission, and distribution, with the exception  
20 of generation and long-range planning, reporting to Bob Labrie,  
21 Chief Engineer. I am in charge of administration of the depart-  
22 ment, reporting to Mr. Hofacker, Vice President of Engineering.

23 Late in 1972, I became involved in the Colstrip Project  
24 when it was decided that the generation at Colstrip would be  
25 increased by the addition of units 3 and 4. It was decided  
26 that the four companies should engage consultants to assist in  
27 the preparation of environmental impact studies as well as all  
28 the necessary engineering studies. It was at that time I was



1 appointed the Project Coordinator.

2 The Project Coordinator had the responsibility of co-  
3 ordinating the efforts of all consultants engaged with each  
4 other and all governmental agencies that may become involved.  
5 The Coordinator also had the responsibility to inform the  
6 Steering Committee of the five companies of progress on this  
7 project.

8 It was the decision of the Steering Committee to engage  
9 Chas. T. Main of Boston, Massachusetts to do all the engineering  
10 relating to the transmission of the project.

11 The scope of work as undertaken by Chas. T. Main is as  
12 follows:

13 A. System Analysis

14 This included load flow and stability studies  
15 to determine the system transfer capability and  
16 provide the basis for the most economical design.  
17 It also included short circuit studies, reliability  
18 studies, evaluation of sub-harmonic problems and  
19 system coordination.

20 B. Transmission Line Design

21 Route selection and engineering connected with  
22 mapping and photography.

23 Conductor evaluation and configuration.

24 Determination of series compensation and shunt  
25 reactance requirement.

26 Switching surge and over voltage analysis.

27 Engineering of steel structures would be  
28 conducted to determine the best tower designs with

1           respect to weather and other ambient conditions.

2           Soil studies, foundation and anchor designs.

3           Preparation of specifications for tower steel,  
4 conductor, insulation and all materials.

5           Sub-harmonic resource studies.

6       C. Substations

7           This work would include engineering studies  
8 for the station designs, including equipment  
9 specifications, basic insulation levels, insula-  
10 tion coordination, transformer sizes, voltage  
11 ranges and tap arrangements.

12           Relaying necessary for the protection of  
13 equipment, transmission line relaying, including  
14 communication requirements.

15           Chas. T. Main was also engaged as material  
16 acquisition agents for the purpose of evaluating  
17 all materials, bids, etc.

18       Chas. T. Main is a very reputable consulting firm. The  
19 home office is located in Boston, Massachusetts, with satellite  
20 offices in Portland Oregon and Charlotte, North Carolina.

21       Mr. Einar Greve, Manager of the Portland office, was  
22 Project Manager for Chas. T. Main. He was in charge of all the  
23 engineering for the Colstrip Project. Assisting Mr. Greve in  
24 this project were the following supervisory personnel:

25       System Planning - George Nesgos. Mr. Nesgos was trans-  
26 ferred to the Middle East and replaced by Mr. Robert Ender. This  
27 function handled in the Boston offices.

28       Transmission - E. S. Zobel, Charlotte, North Carolina.



1 Substations - J. Basilesco - Chet Taylor.

2 Field Supervision - John Cain.

3 Chas. T. Main has had a number of personnel changes since  
4 the start of the project. Mr. Greve resigned to become Vice  
5 President of Tucson Gas & Electric. Mr. Nesgos was promoted to  
6 Manager of a newly created office in Iran. Mr. Chet Taylor is  
7 Project Engineer located in Portland. He supervises and directs  
8 all the engineering between Chas. T. Main and the utilities.

9 The Steering Committee also engaged Westinghouse Environ-  
10 mental Systems Department to prepare an Environmental Analysis  
11 of the project.

12 Mr. Jack Voytko of the Westinghouse Environmental Systems  
13 Department was appointed project manager. He was assisted by  
14 numerous employees of their department's staff, namely:

15 Morton Blinn - Power Plant Program Manager.

16 Brent Wahlgquist - Transmission Program Manager.

17 The consultants were requested to complete their analysis  
18 on the transmission line on a study area that encompasses 36,000  
19 square mile section of Montana. The point for the starting of  
20 the transmission line was Colstrip, Montana, and the termination  
21 of the line to be Hot Springs, Montana. The capacity of the  
22 generation was 2100 MW and the voltage of the lines to be 500 KV.  
23 These parameters had been studied and determined before Chas. T.  
24 Main and Westinghouse had been engaged as consultants.

25 The reason Hot Springs, Montana was considered to be a  
26 terminus of the transmission lines was that Bonneville Power  
27 Administration has a 500 KV station at this location. They now  
28 have a 500 KV line from Dworshak, Idaho to Hot Springs. It is



1 anticipated that Bonneville Power will wheel the power from Hot  
2 Springs west for the other utilities in the Colstrip Project.  
3 Bonneville has a 500 KV network west and by terminating the  
4 Colstrip lines at Hot Springs it minimizes transmission require-  
5 ments west.

6 Numerous meetings were held by the Montana Power  
7 Company's planning engineers in conjunction with other planning  
8 engineers of the participating utilities. 230 KV, 345 KV, 500  
9 KV and also direct current (D.C.) transmission were studied and  
10 the recommendation by them was that two 500 KV lines be con-  
11 structed. Direct current transmission was eliminated early  
12 because of the cost of terminal equipment at intermediate points  
13 along the transmission line necessary to provide the Montana  
14 Power Company means of getting our power into our own 230 KV  
15 transmission system.

16 Underground line was eliminated due to the fact that  
17 industry wide technology has not been developed at 500 KV for  
18 underground transmission and this alternative is not feasible.

19 Higher voltages than 500 KV were considered but found  
20 uneconomical for the amount of generation from Colstrip.

21 230 KV and 345 KV were eliminated due to their inability  
22 to transmit the amount of power the long distance required.  
23 230 KV would require ten transmission lines to transmit this  
24 amount of power that distance. 345 KV would require four  
25 transmission lines. Each of the above voltages would require  
26 much more right of way than the two 500 KV lines. It is ap-  
27 parent that the recommendation by the planning group is the best  
28 available alternative.

1       The recommendation by the planning group was to construct  
2 the two 500 KV parallel to each other with switching stations to  
3 be located as close as possible at one third sections of the  
4 lines.

5       The purpose of the stations to be located at locations  
6 near Helena and Billings is to bus or tie the two lines to-  
7 gether. This is recommended by our consultants to improve  
8 system stability and system reliability. By creating the  
9 switching stations it enables us to relay sections that are in  
10 trouble rather than an entire line from Colstrip to Hot Springs.

11       Our proposal as submitted in our application for the  
12 preferred route is to construct two parallel 500 KV transmission  
13 lines starting at Colstrip and terminating in Hot Springs,  
14 Montana with switching stations located at or near Broadview  
15 and Helena, Montana. At Broadview we are proposing the installa-  
16 tion of 500 KV buses to tie the two lines together. These line  
17 terminals will be equipped with three cycle breakers and high  
18 speed relaying to rapidly interrupt and isolate faulty line  
19 sections. At Broadview we also plan to install the series  
20 compensation and line reactors of sufficient size to satisfy  
21 the requirements as to size and insulation of the capacitor and  
22 reactors. This study has not been finalized to date. We also  
23 plan the installation of transformation from 500 KV to 230 KV  
24 to allow us to tie into our present 230 KV grid as well as the  
25 intertie south to Yellowtail and other utilities in Wyoming.

26       Near Helena we are proposing to construct a switching  
27 station, series capacitors, line reactors, relaying and com-  
28 munications. The two parallel lines will be tied or bussed



1 together at this station. No transformation is planned at this  
2 time but provisions will be made in the station design to allow  
3 for transformation in the future.

4 The switch yard and substations as well as Colstrip  
5 and Hot Springs terminal will be controlled and monitored by  
6 the Montana Power Company dispatcher in Butte. The information  
7 will be transmitted to our dispatcher over the Company Micro  
8 Wave System. Information to be monitored at the dispatch office  
9 is:

10 (a) Position of the line breakers that indicates if the  
11 breaker is open or closed. This is the same for Colstrip, Broad-  
12 view, Helena and Hot Springs.

13 (b) Voltages at all points.

14 (c) Line Amperes.

15 (d) Line vars.

16 (e) Power in watts.

17 (f) Equipment alarms - such as temperature, low air  
18 pressure, battery, voltage, etc.

19 (g) Load flow on incoming 500 KV lines, load flows on  
20 outgoing 500 KV as well as the load flow on the 230 KV lines.

21 The above information informs the dispatcher of normal  
22 as well as sub normal conditions at the stations. When station  
23 alarms are received he immediately notifies the division  
24 superintendent to dispatch someone to the point to determine  
25 what may be wrong and immediately employ any corrective measures.

26 In the original plans for Colstrip units 1 and 2, it  
27 was recommended by our Planning Department that the minimum  
28 transmission requirement would be as follows:



1 (a) Three 230 KV lines from Colstrip to Billings and one  
2 additional 230 KV line from Billings to Anaconda. It was  
3 decided that, in view of expansion of the Colstrip Project to  
4 include additional generation of 1400 MW, it would be necessary  
5 to construct transmission lines in the 500 KV class. If 3 and  
6 4 units are approved, it was decided to minimize 230 KV wood  
7 pole construction. Following this criteria, we are in the  
8 process of constructing a steel tower line of two 230 KV lines  
9 that later can be converted to 500 KV. Our typical 230 KV wood  
10 construction lines cannot be converted to 500 KV. It was also  
11 decided that we would attempt to live with the existing 230 KV  
12 system as is, that is, not to construct the second Anaconda-  
13 Billings 230 KV line until a decision is made on units 3 and 4.  
14 This line is approximately 220 miles and would cost approximately  
15 \$12.2 million. If units 3 and 4 are not certified, we will be  
16 required to make this expenditure to insure a reliable and stable  
17 transmission system.

18 If 3 and 4 generating units and the associated 500 KV  
19 transmission are approved for construction, we intend to convert  
20 the double circuit 230 KV line from Colstrip to Broadview to a  
21 single circuit 500 KV with the balance of the transmission to be  
22 constructed at 500 KV. By constructing the two 500 KV lines  
23 from Colstrip to Broadview and constructing a switch yard and  
24 substation at Broadview from 500 KV to 230 KV, we have eliminated  
25 the need for the two 230 KV lines from Colstrip to Billings,  
26 thereby saving approximately \$11 million.

27 Applicants' Exhibit #105 shows a cost estimate of  
28 \$214,688,000 for the Colstrip-Hot Springs 500 KV transmission

1 project. This estimate is based on a construction schedule to  
2 coordinate with 1980 and 1981 completion dates for Colstrip 3  
3 and 4 generating units. This estimate represents an increase  
4 of 13.4% over a previous estimate of \$189,442,000 which was  
5 based on completion dates of 1978 and 1979 for units 3 and 4.  
6 Anticipated escalation of material and labor costs resulting  
7 from the two year delay in construction are the reasons for this  
8 increase in the estimated costs of the Colstrip-Hot Springs 500  
9 KV transmission project.

1 HEARINGS EXAMINER: Do you have any exhibits with  
2 this testimony, Mr. Peterson?

3 MR. PETERSON: Yes, we move into evidence the  
4 Applicants' Exhibit 105.

5  
6 EXAMINATION OF JOHN T. EVANS

7 Cross, by Department of Natural Resources and Conservation

8 By Mr. Shenker:

9 Q Mr. Evans, you currently are the manager of the Engineering  
10 Department, as well as the Assistant Chief Engineer of the  
11 Montana Power Company, are you not?

12 A Yes, sir.

13 Q And you are still the coordinator of the Colstrip project?

14 A Yes, sir.

15 Q One of the areas on which there has been practically no  
16 testimony so far, Mr. Evans, looks like an area that would fit  
17 into the responsibilities that you have had for the Montana  
18 Power Company. Correct me if I'm wrong, sir, but as I under-  
19 stand it, there are 3 phases of the eventual delivery of  
20 power for the consumer. One phase is called generation, the  
21 second is transmission, and the third is distribution; is  
22 that right?

23 A That's correct.

24 Q In terms of the broad overall cost of those three phases, it  
25 is correct, is it not, that generation usually accounts for  
26 about 40%, transmission about 20%, and distribution about  
27 40%?

28 A Those figures sound fairly correct.



1 Q Have you seen any figures on the cost of distribution for the  
2 Colstrip units 3 & 4?

3 A We have no such figures.

4 Q I didn't think so. Now, as I understand the chronology of  
5 your involvement at Colstrip, Mr. Evans, you became involved  
6 in late 1972, by which time the decision had already been made  
7 within the corporate structures of the applicants for the  
8 Colstrip units 3 & 4 that they would build those units; right?

9 A They were proposing to build those units.

10 Q Yes. They decided that they wanted to. They hadn't filed  
11 their application yet.

12 A That is correct.

13 Q So it would be correct, I take it, for us to infer that you  
14 were not in on the decision-making process or discussions  
15 leading up to the decision to go ahead with the Colstrip units  
16 3 & 4?

17 A I was not in on that, no.

18 Q And at the point that you became involved, you understood that  
19 you would have some coordinative functions and that one of  
20 those functions would be to coordinate with consultants who  
21 would be employed to prepare environmental impact studies; is  
22 that right?

23 A That is correct.

24 Q Now, of course, the consultant who had been employed by the  
25 applicants was the Westinghouse Environmental Systems  
26 department. You were in on the selection or decision to  
27 employ those folks; right?

28 A I was at the meeting where they made their presentation. The

1 selection was made by the Steering Committee.

2 Q The Steering Committee was one in which the Montana Power  
3 Company was represented by Roger Hofacker, who indeed was  
4 the chairman of that committee?

5 A That's correct.

6 Q And you reported to Mr. Hofacker as the coordinator of the  
7 project?

8 A That is correct.

9 Q Now, from the Westinghouse Environmental Systems department,  
10 as I understand it the project manager was a fella by the  
11 name of Jack Voytko; is that right?

12 A Correct.

13 Q The fellow in charge of the generation aspects of the study,  
14 or the power plant program, was a fella by the name of  
15 Morton Blinn; is that right?

16 A Morton Blinn.

17 Q Are both of those fellows still in good health?

18 A Very good health.

19 Q And their boss in turn was a fella by the name of Wright --  
20 W-R-I-G-H-T; is that correct?

21 A That is correct.

22 Q You also had primary responsibility in maintaining coordina-  
23 tion with the folks who were making the transmission line  
24 engineering studies -- that would be the Charles T. Main  
25 Company?

26 A That is correct.

27 Q And what they were supposed to look at was the capacity of  
28 generating, as I understand it, 2100 megawatts from Colstrip

1 to Hot Springs?

2 A That would be the power that was generated at Colstrip, and  
3 it was assumed that that much power could conceivably be  
4 transmitted.

5 Q Now, there are a number of different ways to transmit the  
6 power by line, assuming you've made that decision. One is  
7 to have a D.C. line; another is to have an A.C. line of 500  
8 or 735 or some number of kilovolts; and another would be to  
9 have 2 lines that would each be single circuit. If you were  
10 to choose the alternative of having the single line, that  
11 could be either single circuit or double circuit. Those are  
12 among the alternatives, are they not?

13 A Well, those are all alternatives, yes.

14 Q Of course, what you have proposed is to have 2 500 kv. lines,  
15 each of which is a single circuit line; is that right?

16 A That's correct. That is the proposal.

17 Q Tell me why that's better than having one double circuit line.

18 A Much more reliable.

19 Q Why?

20 A Well, if we should lose or have conditions where you might lose  
21 a structure on a double circuit line, both lines will be out.

22 Q So you would lose both circuits on the line?

23 A You'd lose both circuits on the line. With the other, it's  
24 not conceivable that you'd lose both lines at the same time.

25 Q Well, if they're built close enough to each other, in parallel  
26 structure, which is your general game plan, do you still think  
27 it's not conceivable you could lose both lines at the same  
28 time?



1 A Oh, it's conceivable, yes, but it's highly improbable that  
2 you will.

3 Q You're concerned about reliability all through your system  
4 for transmission purposes, aren't you, Mr. Evans?

5 A That's right.

6 Q You're concerned about your reliability from Colstrip to  
7 Broadview, aren't you?

8 A That's correct.

9 Q And from Colstrip to Broadview you intend to build one single  
10 line that is a double circuit line?

11 A That's correct.

12 Q Is that reliable enough for you?

13 A Well, we're gambling on that. We're assuming that if 3 & 4  
14 go that it won't be too much longer that we'll convert that  
15 to a 500 and construct another line parallel to it, as is  
16 proposed.

17 Q So you think that one day you might have two 500 kv. single  
18 circuit lines running from Colstrip to Broadview?

19 A That is the proposal.

20 Q Of course you don't need that if you're not going to have  
21 the Colstrip units 3 & 4 generating the power for the trans-  
22 mission from Colstrip to Broadview?

23 A That's correct.

24 Q And as I understand your present construction plan between  
25 Colstrip and Broadview, you are building a more expensive  
26 line than you would have to build if you were not contemplat-  
27 ing the prospect of conversion from 230 kv. to 500 kv., as  
28 a possibility. Is that correct?

1 A That is correct.

2 Q Basically, the difference being that you would use wood  
3 towers instead of steel towers on an ordinary 230 kv. line?

4 A That is our practice, yes.

5 Q On Exhibit No. 105 proposed for the applicants, Mr. Evans,  
6 is the estimate of the total cost of the Colstrip to Hot  
7 Springs 500 kv. transmission project, which is listed at  
8 \$214,688,000. When was that exhibit prepared?

9 A This was prepared quite recently.

10 Q Within the last week, month, two months?

11 A Oh, it's within the last five weeks.

12 Q Within the last five weeks -- before this exhibit was pre-  
13 pared was there a meeting of the Steering Committee at which  
14 the five applicants determined that that was the cost as  
15 they projected it?

16 A No, there was not.

17 Q Who made the decision to project the cost at this level?

18 A Well, this is just projected because of the delay in the  
19 -- the possible delay in units 3 & 4.

20 Q It is escalated costs?

21 A Just escalated costs.

22 Q What does that work out to on a per mile basis? Have you  
23 computed that?

24 A I think it states in 2 that it is estimated at 211,169.

25 Q That would be for the exclusion of Colstrip to Broadview.  
26 Have you worked it out with the inclusion of Colstrip to  
27 Broadview?

28 A No, I don't have that figure readily available.

1 Q Now, in your coordinative function with the Westinghouse  
2 Environmental Systems department, Mr. Evans, you attended,  
3 did you not, a meeting in the spring of 1974 where Westing-  
4 house representatives and representatives of the Department  
5 of Natural Resources, and representatives of the applicants,  
6 and other folks from Montana were present to discuss the  
7 Westinghouse environmental analysis?

8 A Are you speaking of the meeting in Helena?

9 Q Yes, sir.

10 A Yes, I was present.

11 Q Do you recognize, Mr. Evans, as Dr. Wright did at the time  
12 of that meeting in the spring of 1974, that if you take a  
13 small population and you have an influx of population that  
14 there are going to be problems?

15 A Are you referring to Colstrip itself, or --

16 Q That might be an example, yes.

17 A Because of the construction of the units 3 & 4?

18 Q Because of the development that would flow from the construc-  
19 tion and operation of Colstrip units 3 & 4, yes.

20 A Well, I hadn't been too concerned about that. I realize that  
21 there will be construction workers there, but what is the  
22 impact on the community? I have never studied it or consid-  
23 ered it.

24 Q Did you not know that Westinghouse's purpose in making its  
25 study was to try to determine the magnitude of such an impact?

26 A Yes, that was part of their analysis.

27 Q Did you understand, Mr. Evans, in the analysis made by  
28 Westinghouse, that it is not so much the growth itself which



1 creates the problem, as the lack of planning for the growth?

2 A Well, that's a reasonable statement.

3 Q In order to determine the socioeconomic impact upon the  
4 Colstrip area and its environs in Rosebud County, you knew,  
5 did you not, that the Westinghouse folks determined to use  
6 basically an economic profile to make their analysis?

7 A Inasmuch as that was the first environmental analysis that  
8 I was ever connected with, and not knowing what would be  
9 required in an analysis such as this, this was prepared pri-  
10 marily because we thought we'd have to have an economic -- or  
11 a Westinghouse environmental analysis made for federal  
12 agencies. This being a part of what environmentalists today  
13 now study in their reports, I can't comment too much on that,  
14 because that is not my expertise. I assume that what they  
15 were doing was correct and proper and necessary.

16 Q Would that that would have been true for all of us to make  
17 those assumptions, sir, but at the meeting in the spring  
18 of 1974, do you recall Mr. Beisel addressing himself, and  
19 Dr. Wright chiming in, on the fact that the measurements of  
20 socioeconomic impacts in the Colstrip area were best found  
21 feasible to study with an economic profile?

22 A I don't remember that statement as you have it there.

23 Q You don't deny that?

24 A What's that?

25 Q You don't deny it, either?

26 A No, I don't deny it. I just don't remember it.

27 Q Okay. Do you recall Dr. Wright referring to the fact that  
28 we could all do another five years of work on the project

1        profitably, in terms of studying the impact?

2        A    I imagine that to be so.  They could if they had the time  
3            and the money to do it.

4        Q    But Dr. Wright's conclusion at that meeting was that they  
5            only had the money for one study, right?

6        A    That's right.

7        Q    Of course, the Westinghouse folks felt that there was a  
8            limitation upon the manner in which they would study the  
9            reactions of folks in Montana, because they were strangers  
10          and were not here fulltime in order to gauge those reactions;  
11          you recall that concern, don't you?

12      A    Yes.

13      Q    With respect to the statistical analyses made by Westinghouse  
14          to try to determine attitudes in the Colstrip area, do you  
15          recall Mr. Sukoff making the statement that they could not  
16          strongly support the statistical statements in their analysis?

17      A    No, I don't recall that statement.  That's been quite awhile  
18          ago.

19      Q    Do you remember the size of the sample that they were dealing  
20          with in their survey?

21      A    I would be guessing, but I imagine it's somewhere between  
22          1600 and 2500.

23      Q    Mr. Sukoff was talking about the limitation of a sample of  
24          1500 folks -- that is a study of 1 out of every 1500 folks --  
25          and on that basis concerned about the statistical propriety  
26          of the extrapolations that could be made; do you recall that?

27      A    No, I don't recall that statement.

28      Q    You don't deny that, either, I assume?



1 A No, I can't deny it.

2 Q Do you recall Dr. Wright's addressing himself to his concern  
3 on the impact of the project, stating, "We were not concerned  
4 with the influx of construction workers, building housing,  
5 associated facilities, expansion of mines, construction of  
6 water and sewer systems, in, for example, Forsyth, or the  
7 construction of extensive facilities in, for example, Hardin."  
8 Do you recall that?

9 A I don't recall it as such.

10 Q That seems likely, given the understanding you had of what  
11 the Westinghouse folks were studying?

12 A Well, they were studying the whole area.

13 Q There is a number of associated concerns on coal development  
14 in Montana that were not addressed, of course, in the  
15 Westinghouse study; isn't that true?

16 A That's correct.

17 Q Do you remember the little discussion with Dr. Wright in which  
18 he purchased some tobacco on the day of the meeting and he  
19 commented that that was the first occasion that he realized  
20 that there was no sales tax in Montana?

21 A No, I don't remember that.

22 Q I think his exact words were, "Well, isn't that interesting,  
23 a state without a sales tax." Did it strike you, Mr. Evans,  
24 that the director of the Westinghouse Environmental Systems  
25 department, Dr. Wright, should have been better informed on  
26 such a question as whether there was a sales tax in Montana?

27 A Oh, I don't think so. That didn't concern me at the time,  
28 and it doesn't concern me right now.



1 Q And with respect to Mr. Beisel's view on taxation, do you  
2 recall his addressing himself to the fact that he certainly  
3 could not say that tax assessments in Rosebud County would  
4 go down?

5 A I don't recall that statement.

6 Q That, I take it, is something that you would not be surprised  
7 at?

8 A Well, I wasn't too concerned with it. You're talking about  
9 phases of utility operation that, really, I'm not experienced  
10 with and not all that concerned with, because we have other  
11 people in our company that handle those things.

12 Q As I understand it, Mr. Evans, in 1966 you succeeded Carl  
13 Davis as manager of the Engineering Department of Montana  
14 Power Company?

15 A That's correct.

16 Q That's not the same Carl Davis who sits in the splendor of  
17 this proceeding, is it?

18 A No, but they may be relatives. I don't know. They look  
19 quite a lot alike in a lot of respects.

20 Q A conflict of interest will be demonstrated later, if  
21 necessary.

22 HEARINGS EXAMINER: No relation.

23 Q When last we had a chance to chat, Mr. Evans, about your work  
24 in connection with the transmission lines, which was back in  
25 April of 1975, it was then your view that the applicants for  
26 the Colstrip project were not intending to do anything dif-  
27 ferently in the construction of transmission lines as a result  
28 of any information obtained concerning the effect of transmission

1 lines on human beings. Is that still your view?

2 A Yes.

3 Q Have you informed yourself since April of last year, Mr.  
4 Evans, on testimony that has been elicited at a hearing  
5 before the New York State Public Service Commission on the  
6 genetic effects of transmission line impact?

7 A No, I have not. I'm sure that on that question you ought to  
8 consult with Bob Ender. Now, I may have misunderstood your  
9 preceding question.

10 Q Do you want me to go over it again for you?

11 A Well, maybe I gave you the wrong answer. Could you repeat  
12 the question before this last one?

13 Q Is it correct, my understanding, that as of April of last  
14 year the Colstrip applicants were not intending to do anything  
15 different in the construction of transmission lines as a  
16 result of any information obtained on the effect of trans-  
17 mission lines on human beings?

18 A Well, to answer that question more correctly, we know of no  
19 ill effects on human beings.

20 Q That's what I understood your answer to be. I understand  
21 your answer now to be, in addition, that since April of 1975  
22 you have learned of nothing that would change the thinking  
23 that you had at that time?

24 A That's correct.

25 Q And specifically, I take it that you are not informed on  
26 testimony elicited within the last several months before  
27 the New York State Public Service Commission, on the genetic  
28 effects on human beings from transmission lines?

1 A No, I'm not.

2 Q The proposed transmission lines in connection with this  
3 Colstrip project for units 3 & 4 are the first such lines that  
4 will be under the sponsorship or operation of the Montana  
5 Power Company; is that correct?

6 A At that voltage, yes.

7 Q The conductor that you have decided to use for the transmission  
8 line is called a Mallard conductor, is it not?

9 A That is correct.

10 Q Is there a number that you use in connection with that?

11 A Well, it's 795 mcm.

12 Q What does 795 mean?

13 A It's 795 million circular mills.

14 Q And that's a size configuration on the conductors used for  
15 the transmission of the power that requires building larger  
16 towers than you would otherwise have to build with smaller  
17 conductors; is that right?

18 A Well, it has a larger diameter and a larger weight per foot  
19 so necessarily you would have more steel in your structures --  
20 not necessarily higher structures.

21 Q But they have to be structures of greater strength?

22 A Greater strength, yes.

23 Q In the course of the preparation of the Westinghouse environ-  
24 mental analysis, there were drafts that went back and forth  
25 from you and Westinghouse and Charles T. Main Company, looking  
26 over some of the preliminary language that was suggested for  
27 various parts of the analysis; you recall that, don't you, sir?

28 A I sure do.



1 Q And on one particular area in the Westinghouse analysis there  
2 was discussion about the need for special care for the place-  
3 ment and concealment of transmission lines near aesthetically  
4 sensitive areas. Do you recall that having been crossed out  
5 from the draft and not appearing in the final?

6 A Well, since our meeting in April -- I was aware of that at  
7 that time. That's when you drew it to my attention. But  
8 since then I haven't seen anything about it, but it was  
9 scratched out according to the report that you had.

10 Q In a parallel section dealing with the preservation of  
11 foliage, you recall, do you not, Mr. Evans, from our meeting  
12 last April, that a correction to the draft inserted the  
13 language "if destroyed" with respect to the foliage?

14 A That's correct. That was in my deposition.

15 Q Yes. Why was that done?

16 A I can't give you the answer on that. There were a lot of  
17 people who reviewed those drafts.

18 Q Basically, Mr. Evans, in those draft reviews, as to the two  
19 sections, for example, that I have referred to at this point,  
20 we were talking there, were we not, about guidelines that  
21 would be provided for the people who would construct the  
22 transmission lines?

23 A That's correct.

24 Q And your understanding was that those guidelines would not  
25 be binding upon the Charles T. Main Company in doing the  
26 engineering for the transmission lines, unless they also had  
27 the contract for construction management; right?

28 A Well, actually, I'm not so sure they'd be binding on them at

1 that time, either, even though they had the construction  
2 management.

3 Q Good, that was the next point I wanted to get to.

4 A The contractor that would be constructing the line would be  
5 required to adhere to those guidelines. It would be the  
6 responsibility of Charles T. Main if they were the managers  
7 of construction to see that the contractor was adhering to  
8 the guidelines.

9 Q Let's just take it one step at a time. You've anticipated  
10 my next question. I take it your answer to my first question  
11 in this area is that those guidelines certainly were not  
12 binding upon the Charles T. Main Company at that time?

13 A That is correct.

14 Q Has the construction management contract been awarded yet?

15 A Not for the transmission lines that we're speaking of; that  
16 is, all the way to Hot Springs.

17 Q Charles T. Main Company is still interested in that job, is  
18 it not?

19 A Yes, they're very interested in it.

20 Q And you would think that they'd be a good candidate to receive  
21 the contract, would you not?

22 A I would assume so.

23 Q Further in the drafts with respect to the guideline areas in  
24 transmission line route construction, there was discussion in  
25 a preliminary form of draft that the areas through which the  
26 transmission line would go should be restored to a condition  
27 as nearly as possible to its original form. The phrase  
28 "as nearly as possible to its original condition" was stricken



1 from the draft. Do you know why?

2 A Well, I can't answer why it was stricken from the draft, no.

3 Q It was your view last April, was it not, that that phrase  
4 would be irrelevant?

5 A That's right, and it still is.

6 Q Westinghouse had the responsibility for putting the analysis  
7 together, but you would expect that Westinghouse would rely  
8 upon Charles T. Main in looking at the transmission line  
9 aspects of environmental impact, because Charles T. Main had  
10 more expertise in construction and construction methods than  
11 Westinghouse had?

12 A That's true.

13 Q When we spoke last April, sir, you had no concern at that  
14 time that there was any reason to be disturbed about the  
15 involvement of Charles T. Main in drafting guidelines which  
16 it might have to implement under a construction management  
17 contract. Do you have any concern about that now?

18 A No, I don't. I'll tell you why.

19 Q Sure.

20 A I expect that the Forest service and the Department of Natural  
21 Resources are going to have guidelines, like they have on  
22 the existing double circuit line that we have to adhere to,  
23 and regardless of what Westinghouse or anyone else has put  
24 in there as guidelines; these were recommendations to the  
25 State, as that that might be looked at. This was for the  
26 State to use in the preparation of their EIS.

27 Q By the way, when we talk about the 500 kv lines we should be  
28 clear, should we not, for the record that we're talking about



1 a system that has a capacity of taking 500 to 565 to 580  
2 kv. over the system, are we not?

3 A Would you repeat the last part?

4 Q The last part was "are we not"?

5 A Well, I think that --

6 Q Do you want the substantive part?

7 A Well, I can't answer the question the way you phrased it,  
8 because you said millivolts.

9 Q No, kilovolts.

10 A Oh, pardon me. When you speak of a 500 kv. system it can be  
11 anywhere between 500 or 580, like you just stated. That is  
12 a correct statement.

13 Q Okay. In looking at these guidelines, Einar Greve was the  
14 head honcho for the Charles T. Main Company during much of  
15 the preliminary steps before he transferred out to Tucson  
16 Gas & Electric Company, was he not?

17 A That's correct.

18 Q Do you recall Mr. Greve's view that the guidelines as proposed  
19 by Westinghouse were too specific and too detailed, attempting  
20 to establish single solutions for coping with each of the  
21 environmental impact problems?

22 A That's right; I remember that.

23 Q You agreed with that, did you not?

24 A That's right.

25 Q Sure, because in your view, as well as Mr. Greve's, it  
26 simply isn't practical to enumerate all the specific solutions  
27 to problems that may be encountered?

28 A That's correct.

1 Q And as a result of that view, you in turn hold the view,  
2 do you not, Mr. Evans, that some of the guidelines that are  
3 stated in the environmental analysis issued in November of  
4 1973 are really a waste of time, although some of them might  
5 be quite good?

6 A Oh, I maintain some of them are very good.

7 Q I beg your pardon?

8 A Some of them are very good.

9 Q And some of them are really a waste of time?

10 A And some of them are a waste of time. That's my personal  
11 opinion.

12 Q Yes. Let's talk briefly, sir, about the subject of right-of-  
13 way. There have been a number of figures used from time to  
14 time as to the extent of right-of-way for the transmission  
15 line. In your view, and again it could be your personal  
16 opinion in your professional position, 300 feet for a right-  
17 of-way should be sufficient about 95% of the time; is that  
18 right?

19 A Well, that's the statement I made in my deposition, and I  
20 stick to that.

21 Q What about the other 5% of the time?

22 A Because of not knowing where the lines are, and not knowing  
23 what the terrain is like, maybe some of the guy wires might  
24 fall out of that, conceivably. It could be very possible.  
25 If you're in a side slope area where a guy wire will go down  
26 the side of the mountain, it could exceed that 300 feet.

27 Q Is one of the reasons for concern on the distance of the  
28 right-of-way of the transmission lines, Mr. Evans, that there

1 are environmental impacts, such as radio interference, if  
2 a line is too close to somebody?

3 A Yes.

4 Q On the engineering information which we discussed during  
5 your deposition last April, the C. T. Main folks in discussion  
6 with Westinghouse thought that the 100-foot clearance was a  
7 little bit larger than they should have to live with, and they  
8 preferred a 65-foot clearance in order to minimize noise.  
9 Do you remember that?

10 A I remember that.

11 Q How do you feel about that?

12 A I'm not too concerned with it because of the fact that we  
13 don't have residents that close to that transmission line, or  
14 we're not contemplating that it would be that close to the  
15 transmission line.

16 Q None at all?

17 A None at all.

18 Q Really? Do you think that's Mr. Ender's view, too?

19 A Well, I wouldn't know. You'll have to ask Bob when he's here.

20 Q Okay. You sort of rely upon the folks from Charles T. Main  
21 to make a judgment like that, don't you?

22 A I rely on both Charles T. Main and Westinghouse, because we  
23 hired them as consultants, and after all, if we didn't think  
24 they had the expertise, we shouldn't have hired them.

25 Q You'd agree with the general proposition, would you not, Mr.  
26 Evans, that the shorter the distance from the outer perimeter  
27 to the edge of the right-of-way, the greater the possibility  
28 of problems on a noise level?



1 A Depending on the signal strength I would expect that.

2 Q On the subject of radio interference, TV interference, corona  
3 loss, and ozone problems, there was some discussion back  
4 and forth between Westinghouse and the C. T. Main folks  
5 wherein the initial draft from Westinghouse said, "The  
6 radio interference design criteria (acceptable corona noise  
7 level at the edge of the right-of-way) is dependent on the  
8 broadcast signal strength, acceptable signal-to-noise ratio,  
9 and population density along the proposed line route." That  
10 was crossed out by the C. T. Main people in their form of  
11 response. Do you know why that was the case?

12 A What was crossed out?

13 Q What I just read.

14 A The whole thing?

15 Q Yes.

16 A No, I do not know the answer to that. Mr. Ender might.

17 Q After we had had a chance to take the depositions of the  
18 people from the C. T. Main Company, they supplied some informa-  
19 tion at our request which included the review of the estimated  
20 access roads that would be required from Broadview to Hot  
21 Springs, and found temporary roads off of the right-of-way,  
22 approximately 8 miles; temporary roads on the right-of-way,  
23 about 60 miles; permanent roads off the right-of-way, about  
24 8 miles; and permanent roads on the right-of-way, about 8  
25 miles. I think you first saw that when we had a chance to  
26 talk when your deposition was taken a few weeks after this  
27 information was supplied to us. Do you remember that, sir?

28 A I remember that.

1 Q Now, that was the first knowledge that you had of the number  
2 and extent of access roads on the right-of-way between Broad-  
3 view and Hot Springs. Why hadn't you known about that before  
4 then, Mr. Evans?

5 A I can't truly understand why I should become so involved in  
6 something when we don't know where the transmission line is  
7 going to be. After we have a corridor selected and we have  
8 a centerline established, that will be the time that we know  
9 that information, and only at that time. The rest of it is  
10 purely a guess, assuming that we can put the line where we  
11 had a preferred route, and that was in a 3-mile corridor.  
12 That is not centerlined.

13 Q Okay. Do you remember, Mr. Evans, as one of your functions  
14 as the project coordinator, advising the representatives of  
15 the other four applicants on some alternatives that they should  
16 consider for delaying the Colstrip units 3 & 4?

17 A Well, we've had so many communications with the five companies.  
18 I suppose that if you have a copy of a letter, why, I did,  
19 but right off hand I can't bring that to mind. What were  
20 the alternatives that I --

21 Q I refer you to Exhibit No. 5 to your deposition of April 17,  
22 1975. That was a letter of November 19, 1974, that you wrote  
23 to the Vice Presidents of the other four companies, explaining  
24 the alternatives to them.

25 A What were the alternatives that I --

26 Q Well, as you saw it, Mr. Evans, they were based upon what  
27 Bechtel had told you in its letter of November 14, 1974. Does  
28 that refresh your recollection a little bit more now?



1 A No, it doesn't, because in all probability this letter was  
2 prepared for me by Mr. Labrie, if it comes from Bechtel.

3 Q Right. The way I get that, Mr. Evans, you were trying to  
4 explain in hard dollars, cost calculations, for the other  
5 applicants what their alternatives were on the delays of  
6 the Colstrip units 3 & 4, as discussed in that Bechtel letter.  
7 Is that how you read it?

8 A This is a communication that was forwarded by Mr. Labrie to  
9 me for transmittal to the five presidents. The details of  
10 this I'm not familiar with, and the reason why is that in this  
11 phase of it, which pertains primarily to the generation, that  
12 was Bob's function.

13 Q I understand. As you conveyed the information to the other  
14 applicants, however, based upon the material that Mr. Labrie  
15 prepared for you, you looked at, as of November 19, 1974,  
16 based upon the Bechtel discussion of alternatives as of  
17 November 14, 1974, the prospect of delaying unit No. 3 for  
18 one year and unit No. 4 for ten months, and the prospect of  
19 delaying unit No. 3 for nine months and accepting unit No. 4  
20 one month early and storing it for one year?

21 A That's correct.

22 Q Those were two of the four alternatives described in Bechtel's  
23 letter?

24 A That is correct.

25 Q Now, on page 3 of that letter, Mr. Evans, you stated a  
26 recommendation -- I take it it was not your personal recom-  
27 mendation, but that of Mr. Labrie and Mr. Hofacker, in  
28 particular -- that the applicants should proceed with the



1 scheduled delay in accordance with Alternate 2 in the  
2 Bechtel letter, which was to delay the unit for one year.  
3 Is that right?

4 A At that period in time, yes; that was correct.

5 Q What you were looking at was cancellation costs or delaying  
6 costs as a result of that kind of decision?

7 A That's correct.

8 Q And in particular, the major item that you were talking about  
9 as of that time was what?

10 A Inasmuch as I didn't work on the details, I don't know, but  
11 it says in the letter the turbine generator.

12 Q And that, of course, is one of the major items for the  
13 generation complex, isn't it?

14 A That's correct.

15 Q When last we took your deposition, Mr. Evans, you were then  
16 of the mind that there were no means that you intended to  
17 employ for monitoring the environmental effects of your  
18 transmission lines, other than a twice-yearly inspection by  
19 airplane; would that be correct?

20 A Not totally correct. Like I told you in my deposition, from  
21 the operation of the system we monitor the voltage of the  
22 substations we referred to; we monitor the line current,  
23 the position of the breaker, and alarms that might be trans-  
24 mitted over our microwave system to the dispatcher. We're  
25 going to patrol the line, which is a general practice of the  
26 operating department, to patrol it twice a year, in the  
27 spring and fall.

28 Q Do you have your deposition there handy, Mr. Evans? Turn to

1 page 122. You're recalling quite accurately the deposition  
2 testimony of some 9 or 10 months ago. I take it you've  
3 reviewed it recently?

4 A I sure did, but not enough.

5 Q Your last answer I think could be corrected a little bit  
6 from looking at the deposition testimony on line 22 of page  
7 122. The question I asked you was, "Was it your testimony  
8 that after construction it is intended no monitoring of the  
9 transmission lines to what if any environmental effects are  
10 occurring?" and after repeating the question for you, your  
11 answer at that time was, "I think that what should be said  
12 there is that we intend to monitor the transmission line by  
13 air patrols, maybe twice a year." That's true, isn't it, sir?

14 A That's true.

15 MR. SHENKER: I have no further questions of Mr.  
16 Evans, and I have no objection to the tendered exhibit,  
17 No. 105.

18 HEARINGS EXAMINER: Very well. I won't act on it  
19 till Mr. Meloy has completed his cross-examination.

20 MR. PETERSON: I didn't know that Mr. Evans was  
21 going to have the pleasure of having Mr. Meloy examine  
22 him.

23  
24 Cross, by Northern Cheyenne Tribe, Inc.

25 By Mr. Meloy:

26 Q I just have a few short questions. Mr. Evans, did Mr.  
27 Hofacker know that you had prepared Exhibit 105 at the time  
28 he testified? What relationship does Mr. Hofacker have in

1 the Power Company organization structure with regard to  
2 yourself?

3 A Well, he's my boss.

4 Q Okay. My question is, did Mr. Hofacker know that you had  
5 recalculated the estimated total cost of the transmission  
6 project, Colstrip to Hot Springs, at the time he testified  
7 in this proceeding?

8 A I'm not 100% sure of that. What we had done was just to  
9 escalate that to show what the additional cost for delay in  
10 the construction of the transmission lines would be, and  
11 I'm not sure whether Mr. Hofacker has a copy of that or not.

12 Q Well, Mr. Hofacker told us that one of the exhibits that  
13 he had previously put in which included data relating to  
14 transmission project costs, Colstrip to Hot Springs -- told  
15 us that he hadn't redone that exhibit over this period of time,  
16 because the comparable costs in his estimation of shipping  
17 were not great enough for him to recalculate it.

18 A Well, there's an increase there from -- I think it's \$189  
19 million to \$214 million.

20 Q A 13.4% increase?

21 A Which is purely and primarily an escalation and interest  
22 during construction.

23 Q Did you prepare the previous estimate of \$189 million?

24 A You're asking me personally if I prepared it? No, I did  
25 not prepare it. My staff prepared it.

26 Q Your staff?

27 A Engineers in the department.

28 Q Do you know the factors which were considered when that



1       \$189 million figure was calculated?

2   A   Generally, yes.  It's the materials of the transmission line  
3       and the engineering that goes into it, and the labor involved,  
4       and these, as you know, are our best guesses and estimates.

5   Q   And it's important to make this kind of an estimate in order  
6       to know what is the best alternative, cost-wise?

7   A   That's true.

8   Q   When the original \$189 million figure was calculated, and  
9       when you escalated that amount by 13.4%, I think you told  
10      Mr. Shenker that was done within the last 5 weeks?

11  A   That's correct, and if I remember correctly, I believe Mr.  
12      Hofacker testified prior to that time.  Now, I'm not positive  
13      of the date that he came over here, but I'm sure -- or I feel  
14      quite sure that it could have been before we submitted this  
15      and before we re-estimated it.

16  Q   Does the estimate include the costs of acquisition of right-  
17      of-way?

18  A   Yes, it does.  Acquisition of right-of-way, road construction,  
19      steel towers for the transmission lines, the conductor,  
20      the conductor assessories --

21  Q   Do you know on what basis your staff people predicted the  
22      costs for the acquisition of right-of-way?

23  A   Right offhand I'd have to see details on it, and at this  
24      particular period in time I'd be guessing, but I don't think  
25      it's over maybe \$5,000 a mile for the right-of-way.

26  Q   Your staff people, though, generally you can say that your  
27      staff people use the method of evaluation presently used by  
28      District Courts in this state in condemnation proceedings, or

1       how did you come up with the \$5,000 figure?

2       A    No, we don't use the figure that you mentioned first. We use  
3       the figure that we get from our land department as to what  
4       the possible cost is for a structure in this type of an area.

5       Q    Did you know that your company was involved in litigation  
6       which has been presented to the Supreme Court and on which  
7       the Supreme Court issued an opinion last Thursday on valuation  
8       of properties for utility condemnation purposes?

9       A    I was apprised of that.

10      Q    What was the result of that decision?

11      A    Well, if I told you what the result was, it would be rumors.  
12      I haven't read or I haven't seen the decision, but I under-  
13      stand that they were awarded the amount of money that they  
14      requested.

15      Q    If I told you that that amount of money was based on compara-  
16      ble sales data of residential tracts, even though the property  
17      to be condemned was agricultural land, that would have an  
18      effect on future valuations of property, would it not, in  
19      this state, as far as transmission rights-of-way are concerned?

20      A    I wouldn't guess as to what the effect might be.

21      Q    Well, if the Supreme Court decision permitted data which --  
22      evidence in a condemnation hearing which permitted the  
23      defendant land owner to take the value of his property based  
24      on its sales value as residential tracts, as opposed to its  
25      sales value as agricultural land, that might have a fairly  
26      substantial impact on the amount and the cost of acquiring  
27      that right-of-way, would it not?

28               MR. PETERSON: I'm going to object to this question

1 as being an incorrect statement of the decision of  
2 Wolfe v. Montana Power Company, and as being improper  
3 to the inquiry before the Board of Natural Resources  
4 because the evidence is too indefinite to show that  
5 the situation that was in the Wolfe case is comparable  
6 to the Colstrip preferred corridor.

7 MR. MELOY: Mr. Davis, I had phrased that as a  
8 hypothetical question. I think the legal question of  
9 whether or not the Supreme Court has restated how utility  
10 corridors are supposed to be valued is something that  
11 we can argue later. My question to the witness here  
12 is, if in fact the results of that Supreme Court decision  
13 is to change the valuation method, would that not have  
14 an effect on his estimate of construction costs. And  
15 that is important to the Board of Natural Resources,  
16 because it is indeed one of the things that Mr. Hofacker  
17 attempted to persuade in his testimony, it was one of  
18 the alternatives the Power Company considered.

19 HEARINGS EXAMINER: Objection overruled. You can  
20 answer the question. Did you ask the question as to  
21 the manner in which he arrived at the figure he's using  
22 in Exhibit 105?

23 MR. MELOY: Yes.

24 HEARINGS EXAMINER: Okay, you can answer the  
25 question.

26 A Would you repeat the question?

27 Q Okay. The value that you arrived at in Exhibit 105  
28 included the cost of acquisition of property. You told us



1 that it did.

2 A Right.

3 Q Okay. If the method by which evidence were received in a  
4 hearing in Montana in a condemnation proceeding were changed  
5 by the Supreme Court so that new values, such as values for  
6 resale for residential purposes, were permitted to be sub-  
7 mitted to the jury in those cases, would that have an effect  
8 on your calculations in Exhibit 105, for the total estimated  
9 cost of the transmission project?

10 A If the price was higher than we estimated, yes. It would  
11 have an effect.

12 Q You wouldn't have known about this decision when you made up  
13 your --

14 A It just came out last week, didn't it? And however, we as  
15 engineers rely on our land department to make the valuation  
16 in the right-of-way cost, not us.

17 MR. MELOY: I have no further questions.

18 MR. PETERSON: May I have a few minutes?

19 HEARINGS EXAMINER: Yes, you may.

20 (BRIEF RECESS)

21  
22 Redirect, by Applicants

23 By Mr. Peterson:

24 Q Mr. Evans, with regard to Exhibit No. 105, you have testified,  
25 I believe, that the figure of \$211,169 per mile did not  
26 include any cost from Broadview to Colstrip. Is that correct?

27 A I may have made that statement, but it does include, like  
28 shown at the top, a 500 kv. line from Colstrip to Hot Springs,

1 and a second one is Broadview to Hot Springs No. 2 line.  
2 Now, that does not include the cost of the double circuit  
3 230 kv. line that we're now constructing. This is for a  
4 total cost of 745 miles of transmission.

5 Q But the figure does include the second line that would be  
6 required to be constructed in the event that 3 & 4 are  
7 operated?

8 A That is correct.

9 Q With regard to the distribution costs not being included in  
10 the figures, why is that?

11 A The reason that the distribution cost is not figured in the  
12 figure of the Colstrip plant and transmission is that the  
13 existing distribution would be sufficient, and if not suf-  
14 ficient, if it is to meet our projected loads in the future,  
15 why, we will require additional distribution. But that  
16 wouldn't vary if we didn't have this project and we had  
17 another source of generation and another source of transmis-  
18 sion. These distribution costs would go on just the same.  
19 Likewise, there are no figures in there for distribution  
20 primarily because the other four utilities involved, we  
21 expect that their distribution facilities are the same.  
22 They are either adequate or to meet their projected load  
23 they'd have to have additional distribution, regardless of  
24 whether 3 & 4 went.

25 Q All right, now with regard to the discussion that you had  
26 as to an operating level of these lines being at 580 kv.  
27 How do you compute that figure?

28 A Normally that figure of 580 is approximately 10% above

1 the normal operating voltage of 525. We wouldn't intend to  
2 operate our system at any 580 or 585. I would expect that  
3 our voltage will range between 500 and 550, depending on  
4 the loading conditions. At light load periods, it might be  
5 550. At heavy load periods it might be down around 500.  
6 This is usually figuring a nominal voltage of 525, plus or  
7 minus 5% -- that is 5% above or 5% below.

8 MR. PETERSON: That's all I have.

9 MR. SHENKER: No questions.

10 HEARINGS EXAMINER: Mr. Meloy.

11 MR. MELOY: No questions.

12 HEARINGS EXAMINER: Thank you. Very well, Exhibit  
13 105, Applicants', is admitted. You are excused, sir.

14 (WITNESS EXCUSED)

15 HEARINGS EXAMINER: Any other witnesses, sir?

16 MR. PETERSON: No, Mr. Davis.

17 HEARINGS EXAMINER: All right, we'll recess until  
18 9:00 o'clock in the morning.

19  
20 (RECESS AT 4:15 P.M.)

21  
22 \* \* \* \* \*











